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Monograph on

CRITICAL ISSUES IN SPECIAL EDUCATION: IMPLICATIONS FOR PERSONNEL PREPARATION

Editors

Lyndal M. Bullock

Richard L. Simpson

University of North Texas

Denton, Texas

1991

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About the Editors.

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Papers included in this monograph have been developed based on presentations and discussions at the "Forum on Emerging Trends in Special Education and Implications for Training Personnel" which was jointly sponsored by the Division of Personnel Preparation, Office of Special Education Programs, Washington, DC and the University of North Texas, Denton, TX on December 13-14, 1990.

The points of view expressed in this monograph are those of the authors and do not necessarily reflect the positions of the U. S. Department of Education or the University of North Texas, and no official endorsement should be inferred.

Copies of this monograph may be purchased for $12.00 by writing to Programs in Special Education, University of North Texas, P.O. Box 13857, Denton, Texas 76203. (Make checks payable to: UNT, Programs in Special Education.)

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A limited number of copies of the monograph based on presentations and discussions at the "Forum on Emerging Trends in Special Education and Implciations for Training Personnel", February 8-9, 1990 are still available from Programs in Special Education, University of North Texas, P.O. Box 13857, Denton, TX 76203 for $10.00. (Make checks payable to: UNT, Programs in Special Education).

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Lyndal M. Bullock
Richard L. Simpson

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PREFACE

In his book Teachers for our Nation's Schools, Goodlad (1990) provides a blueprint for change needed to prepare teachers, administrators and related services personnel who are able to address the diverse needs of today's children and youth, in calling for change, Goodlad voices the same concern as an ever increasing number of teachers, parents, legislators, community leaders and common citizens, that is, educational improvement must occur in order for our country to maintain its competitive edge and for our present quality of life to be preserved.

There is little question that educational personnel preparation program modifications and improvements have the greatest potential for facilitating systemic educational reform at all levels, including special education. Thus, the Third Annual Forum on Emerging Trends in Special Education and Implications for Personnel Preparation focused on addressing issues that impact on children and youth with disabilities, and implications of these issues for personnel preparation. Indeed, by sponsoring the forum, the Division of Personnel Preparation, Office of Special Education, United States Department of Education, has taken a significant leadership role by providing a forum for personnel concerned with the education of children and youth with disabilities to engage in dialogue regarding selected critical issues related to personnel preparation.

This monograph, Critical Issues in Special Education: Implications for Personnel Preparation, was designed to capture and disseminate in a timely manner the ideas and recommendations emanating from the discussions at this Third Annual Forum. Papers in the monograph were authored by professionals representing a broad spectrum of interests, including higher education, public schools, state departments of education, and private organizations concerned with children and youth with disabilities. The papers address a variety of topics within five general areas: (a) Multidisciplinary Approaches; (b) integration/ Inclusive Educational Opportunities; (c) Early Intervention; (d) Personnel Preparation, and (e) At-Risk populations. Employing a common format of issue identification, alternative solutions, inhibitors to change, and strategies for moving toward the ideal, the papers provide a structure for how special educators must now begin to address challenges which will guide the field into the twenty-first century. All papers submitted by Forum participants which were relevant to one of the topics being considered have been included in this monograph in order to facilitate the discussion of the issues facing the field. It should not be

inferred that the papers represent unanimity of opinion among Forum participants, because there were many diverse views expressed in the Forum sessions.

In writing about changes for the future, Goodlad (1990) observes that:

> "If little is done, if only halting steps are taken, if we become bemused in contemplating utopias, it is certain that conditions will be markedly worse--perhaps catastrophically so. There are two things we can be certain of: The world will be very different, and the circumstances of our lives will be largely the product of our commissions and omissions . . ." (p. 377)

Critical Issues in Special Education: Implications for Personnel Preparation is an effort to ensure that appropriate changes are made, and that all children and youth, including those with special needs, will have a future designed to maximize their academic and social/emotional potential.

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References

Goodlad, J. I. (1990). Teachers for our nation's schools. San Francisco: Jossey-Bass.

INTRODUCTION

OVERVIEW OF THE FORUM

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This document is the product of the Third Annual Forum on Emerging Trends in Special Education and Implications for Personnel Training which was co-sponsored by the University of North Texas and the Division of Personnel Preparation, Office of Special Education Program, U. S. Department of Education. Dr. Judy Schrag, Director of the Office of Special Education (OSEP) convened the meeting in December 1990. The professionals who participated attempted to identify the trends in education that are affecting and will continue to affect children and youth with disabilities, birth to 21, over the next several years. The identified trends were then linked to implications for the training of personnel. Segments of the deliberations are reported herein.

The philosophy that provided the impetus for the Forum was succinctly stated by Robert Davila, Assistant Secretary for the Office of Special Education and Rehabilitative Services (OSERS), in a Mission Statement issued in February 1990:

> "In order to enhance opportunities for people with disabilities to achieve their individual potential and maximum participation and productivity in society, the mission of OSERS is to provide effective leadership to improve special education and rehabilitation services through research, innovation and development, training, dissemination, and support of direct services."

This desire to support the field in its efforts to meet the challenges served as the inspiration for the Forum.

The Design of the Forum

The Forum consisted of a four-step process: (a) identifying emerging trends for discussion; (b) formalizing the topics for small group discussions; (c) developing potential strategies for addressing the personnel training implications of each group; and (d) disseminating formal papers of small group representatives.

Step one in the process was to identify future trends in education that will be affecting individuals involved in training personnel who work with persons with disabilities, birth to 21 years of age. Thus, previous grant applications identified issues considered to be the most critical to their projects and prioritized a list of up to ten topics. These lists were then reviewed and matrix of topics was developed. The topics clearly fell into two broad categories: collaborative efforts and innovative practices. These were used to structure the Forum discussions.

Step two involved the formation of small groups in which the aforementioned topics were discussed. During the Forum, one-half of the participants discussed Collaborative Efforts which encompassed three subtopics: (a) multi-disciplinary, (b) integrated/ inclusive educational opportunities, and (c) community focus. The Innovative Practices group also divided into three subgroups: (a) early identification, (b) personnel preparation, and (c) at-risk populations.

The outcomes from these two discussion groups are reported in this monograph. Thus, the responses are from the field of special education and related services. Recommendations are relevant to the field, state education agencies, local education agencies, and the federal government.

Participants in the Forum

There was a deliberate attempt to ensure a representation of Forum participants from a cross-section of disciplines. Thus, in order to facilitate a more comprehensive discussion of the topics, persons with expertise in service delivery and policy formulation were invited to participate along with professionals from higher education, special education personnel trainers, parents, local school district personnel, medical personnel, and persons from related services (e.g., psychology, therapeutic recreation). Participants represented state education agencies (4%), local education agencies (8%), private non-profit agencies (11%), and institutions of higher education (77%). Of the approximate 75 professionals present, 23% were minority, 11% had disabilities, and 15% were parents of children/youth with disabilities. Each possessed expertise and experiences which enhanced the discussions.

In Accordance With One Another

Far from being incidental, topics discussed at the Forum aligned strongly with goals of OSERS (1990) and issues in the literature. The following citations serve to illustrate these points:

Personnel Preparation

1. Link between personnel training and research; cross disciplinary certification; and life-long learning.

2. Improve the overall quality of educational services, including the methods for educating students, and the information regarding services and strategies to service providers, persons with disabilities, their families and others.

3. ". . . the transition to an information- and technology-based economy is going to require us to develop and sustain over time an educated, flexible, and trainable work force that can be productive in this kind of environment." (Wilkinson, 1990, p. 604)

Multi-disciplinary

1. Collaboration between regular and special education; administrative consideration; and parent involvement.

2. Improve strategies for educating students with disabilities in the regular education environment. Increase the volume and quality of information which decision-makers need and use to determine appropriate placement of children with disabilities. Develop a variety of family support models that will enhance a family's capacity to be not only informed decision-makers related to their sons and daughters with disabilities, but to also be active participants in their communities.

3. ". . . those who are not prepared for today's demanding workplace will be even further removed from the mainstream of societal opportunities than they are today and will most probably be a part of our growing 'underclass'. It would be naive to assume progress can be made without a fundamental commitment to improving the educational system for all of our children . . . Public and business leaders, parents and teachers, colleges and universities, as well as students are all critical to our education system." (Gardner, 1990, pp. 593-594)

At-Risk Populations

1. Cultural diversity; modern morbidities; and dropouts.

2. Increase access to rehabilitative services by previously underserved groups, including minorities and rural students. Decrease the number of students with disabilities who drop out of secondary school prior to graduation.

3. ". . . the socioeconomic and class differences among citizens that have been so difficult to change now threaten to create a 'two-class' society . . . We face the prospect of a burgeoning 'underclass' that is chronically undereducated, unemployed [underemployed] and so disaffected that they will live out their lives captive to social welfare and correctional systems over which they have little or no control . . . Several [commitments] to innovation focus directly on programs for at-risk students, technology, parental involvement, extended school year, multicultural education, early childhood education, restructuring the school day and curriculum, and coordinating school and social services to students (and families) at-risk." (Gardner, 1990, pp. 592, 601).

Community Focus

1. Transition efforts: interagency coordination; and functional/creative curricula approaches.

2. Increase effective practices to prepare youth with disabilities for employment in the competitive workplace; increase the efficiency and effectiveness of special education and rehabilitation services through improvements in interagency coordination at the federal, state, and local levels and develop successful models to increase informed participation of individuals with disabilities in planning and implementing their own rehabilitation plans.

3. "Our best hope for raising employment levels among persons with disabilities is to provide for them a quality education so they can meet job demands. OSERS can give awards to programs providing excellence. The National Institute on Disability and Rehabilitation Research (NIDDR) could support demonstration projects illustrating how academic and

prevocational preparation of children and youth could be improved. The Rehabilitation Services Administration (RSA) has authority under Innovation and Expansion grant programs through its short- and long-term training programs to enhance prevocational training. The Americans With Disabilities Act (ADA) allows states to go beyond the minimum federal requirements. It is possible that the complex web of work incentives and disincentives under Supplemental Security Income (SSI) may be unraveled soon . . ." (Bowe, 1990, pp. 6-7)

In summary, the issues at the Forum were clearly in concert with the initiatives of OSERS and in sync with the special education profession's challenge at large. Although the various articles only briefly summarize highlights of the small group discussions, they reflect the seriousness with which the participants took their charge.

References

Bowe, P. (1990). Employment and people with disabilities: Challenges for the nineties. OSERS News in Print III (3), 2-6.

Davila, R. (1990). OSERS Mission Statement and Goals. Washington, DC.

Gardner, B. (1990). Directions for education in America. Journal of Educational Finance, 15, 592-602.

Wilkinson, W. (1990). Education reform and economic competition: Critical issues. Journal of Educational Finance, 15, 603-609.

* This article was written by the authors in their private capacities. No official support or endorsement by the Department of Education is intended or should be inferred.

EMERGING TRENDS IN SPECIAL EDUCATION AND IMPLICATIONS FOR TRAINING PERSONNEL"

Remarks by ROBERT R. DAVILA
Assistant Secretary for Special Education and
Rehabilitative Services
U.S. Department of Education

It is an honor for me to be here with all of you today at this forum on emerging trends in special education and implications for personnel preparation. I am impressed with the scope of the topics covered by your agenda. Innovative efforts and collaborative practices are two of the most critical needs the field faces today. Developments in these key areas in the field and at OSERS will be major factors contributing to the success of your programs. I will be most interested in studying the monograph which results from this meeting.

When I was asked to deliver remarks, I accepted gladly, since this will give me a chance to share with you my views on the current state of special education.

Upon my arrival last year at the Department of Education to assume the assistant secretaryship for the office of Special Education and Rehabilitative Services (OSERS), one of my first actions was to work with OSERS staff to develop a new mission statement for the agency.

This mission statement emphasizes that the goal of all the educational and rehabilitative services we provide for persons with disabilities is to help them achieve maximum participation and productivity in society. This is the cornerstone of all of our efforts at OSERS.

I know that integration has been and continues to be a topic of great interest to this group. I think it goes without saying that successful integration must begin with competent personnel training programs. The extent to which we can provide teachers and other school personnel with the necessary skills to implement appropriate integration in the school setting will determine how well we succeed in our mission. This is critical, because we know that children with disabilities do not always have fully-certified teachers. Recent testimony before the senate suggested that up to 30 percent of current special education teachers were not fully-certified for the positions they held.

The U.S. Department of Education views this as a very serious national problem in special education. We are proceeding with several steps to improve this situation. Beginning next year, we will be expanding several data

collection activities to better identify the extent and nature of this problem. We have also recently proposed a priority under our personnel preparation program to direct additional federal support toward helping teachers become fully qualified. We hope that these initiatives will improve the situation in the near future.

We also know from our national transitional longitudinal study, currently being conducted by Stanford Research Institute in California, that the majority of students with disabilities spend most of their time in regular education; however, about one in three of these students are failing one or more classes. Of this group of students, about 10.5% are failing six or more classes. I think that as special education personnel continue to assist regular education professionals in adopting innovative strategies in the regular classroom, we can reduce these difficulties.

Because I believe that integration is at the heart of what we are trying to accomplish, I would like to discuss with all of you some of the things we are doing in OSERS to promote the integration of students with disabilities.

I will begin my remarks with an analogy which I believe illustrates how our efforts to achieve integration have adapted to ever-changing circumstances. Before the invention of the automobile, the buggy was quite a valuable commodity, and many would perhaps say that to own one was a necessity.

Well, in fact, the real necessity was the provision of transportation, and the buggy was only a means for satisfying that necessity. That is why with the invention of the automobile, the buggy quickly became obsolete as a reliable means of fulfilling that need.

But the real necessity, the need for transportation, has not and will never change. Fifty years from now, the automobiles of today will be considered antiques, as the means for meeting the necessities of life grow and change with the society in which we live.

I think the same truths apply to special education. The true necessity is the delivery of a quality education to all students with disabilities in the best, most effective manner possible. Like the need for transportation, that need will never change nor diminish over time. What has changed, and will continue to change as we grow in knowledge and experience, are the means by which we are able to deliver that quality education.

Like the buggies of yesteryear, many philosophies concerning the place in society that individuals with

disabilities should hold are long outmoded, replaced by concepts based on equality and full participation in all aspects of daily living.

It was this philosophy of equality, in the sixties and seventies, that gave advocates the courage to reach far beyond present accepted practice to envision and bring about the passage of the education of the Handicapped Act, Public Law 94-142, in 1975.

Inevitably, tension will exist between a philosophy of total equality and our ability to fulfill that philosophy.

This same tension, this vision, and this need to improve services preceded passage of the Education of the Handicapped Act. Recently renamed the "Individuals With Disabilities Education Act" (IDEA), is now driving that same act further down the road toward full inclusion.

This says something wonderful and yet sobering, as well. The wonderful part is that our philosophy is being stretched and shaped and molded into a vision of society that views individuals with disabilities as people first and foremost. This philosophy will not accept the use of terms such as "disabled person," but instead, demands the use of terms such as "person with a disability."

This is no semantic game, for it bespeaks our inner attitudes and perceptions of the world around us, showing our respect or lack of it for those with whom we come in contact.

The sobering part is that this philosophy, which has at its heart the full participation of individuals with disabilities in every aspect of community life, has, in some ways, outstripped our present ability to make the philosophy a reality for all whom it embraces.

As you well know, under part B of "IDEA," all children with disabilities, regardless of the severity of their disabling condition, have the right to be educated in the least restrictive educational setting in which an appropriate education can be provided. The law requires that public agencies ensure that a range of placement options and appropriate supports be made available to meet the individual and unique needs of children with disabilities for special education and related services.

I know that problems can arise, owing to this very flexibility. But a range of placement options can and should lead to a placement based upon the individually-determined needs of each particular child.

Although we in OSERS embrace the concept of full inclusion, we also believe that our philosophy outstrips our present capacity to achieve it fully. Those involved in the teacher training process are now, and will continue to be, at the forefront of our efforts to bridge the gap that exists between what we desire and our present ability to bring it about. It is our teacher training programs that will continue to offer the latest and most innovative best-practice information to new special and regular education personnel, both now and in the future. It is your programs which will be the main conduit for supplying qualified personnel so that we can continue to maintain the high level of quality we expect from our school systems.

And so this tension exists between our vision, or philosophy, and the capability of the educational service system to provide the needed components of a quality program.

Our present way of thinking must be flexible and progressive enough to change over time as our knowledge grows and our understanding of new and innovative best practices evolves.

We all know that today's minimal support services would have been seen as wildly indulgent only 20 years ago. I am sure that in the foreseeable future, our approaches will change just as dramatically, and that integration for all students with disabilities, including those with severe disabilities, will become a reality.

Our continuum of educational options must be much more dynamic, fluid and changing. It must be coordinated, it must stress continuity, and be made more widely available. And even then there will be new and continually-changing frontiers to challenge us in our quest for the best possible quality of life for children, youth and adults with disabilities and their families. In order for this to occur, we must rely upon teacher preparation programs as a critical part of the feedback "Loop," translating the knowledge we gain in the field into usable and practical guiding principles for the future.

As you may know, we are supporting a center at Research Triangle Institute, in Chapel Hill, North Carolina, which is preparing information on integrated educational models for use by regular and special education teachers, as well as institutions of higher education, to assist them in implementing regular education strategies for students with disabilities. Such strategies include peer tutoring, cooperative learning, collaborative teams, and school-based management.

In other areas, we are funding a number of technology-related projects that are providing information about the alignment of technology with appropriate curricula for students with disabilities within the regular classroom.

Another effort that we are supporting is an outcomes center and a policy options project, that will focus on the policies, procedures and other supports needed to improve student outcomes, including greater success in regular classes.

We are also strengthening out technical assistance capability. Dr. Schrag and her staff have been meeting with the various clearinghouses, institutes and centers that we fund, with the goal of achieving better coordination and linkages among these programs and with OSEP. For example, we hope to work with the regional resource centers and the California Research Institute to develop one or more examples of procedures which the SEAs can establish within their state monitoring systems to assess how local educational agencies make "LRE" placement decisions. We are developing this technical assistance effort because we note that SEAs are having difficulty in developing and implementing this particular part of their statewide monitoring systems.

In addition, we will be developing sample parent notices to assist states in meeting the requirements under "IDEA" with regard to parent notification. We are also planning technical assistance to states regarding individualized education programs (IEPs) and transition plans, which will be required by the "IDEA" reauthorization.

It is our intent to enhance our technical assistance activities in those areas where our monitoring efforts have identified weaknesses.

As directors of federally-funded projects, you are well aware that we have established priorities in several discretionary grant programs that support additional integration projects and activities.

Dr. Schrag and her staff provide ongoing information to all states regarding these projects, so that similar efforts can be replicated and implemented throughout the country. We support the efforts of the California Research Institute, which conducts research, disseminates information, and provides technical assistance to funded statewide systems-change projects.

As I mentioned earlier, the Outcomes Center and Policy Options Project will continue some of this work focusing on the state and local policies needed to further implement "LRE" placements and programs.

With regard to personnel preparation, we are supporting a number of pre-service and in-service projects for regular classroom teachers in the area of integration. As a result of these research activities, and the emphasis on the regular education initiative, at least half of the states have some initiative or statewide activity that is focusing on the investigation of circumstances that support the education of students with disabilities within the regular classroom.

In addition, states are initiating efforts which focus on the role of the building principal to lead school-based teams through the change process. It is hoped that through this effort, special education will be more closely coordinated with other special programs and with general education, and that "pull-out" programs will be minimized, and maximum support provided to the general classroom teacher.

At this point, I would like to close my remarks by saying that I truly believe that we are moving in the right direction toward making integration a reality for <u>all</u> students. I think that we have learned a lot about how to integrate successfully students with disabilities through model and policy development and implementation throughout the country.

As I said earlier, I foresee a time when we will look back to the 1990's, to our frustrations, our growth, our change, our successes and our failures, and we will see them as steps in a long, often painful, but ultimately worthwhile and rewarding process.

As we engage in this process, I would ask that you, through your professional activities, continue to work with us, as partners, to reach our mutual goal of providing a quality education in the "least restrictive environment" possible for all children with disabilities. I also ask that you continue your efforts to recruit college students and young professionals for careers in special education. I know all of you are acutely aware that we must increase dramatically the number of college graduates who seek careers in this field. This priority emphasis is especially significant for that population of children with disabilities aged birth to five years.

I also want you to know that we at the federal level understand the special challenges all of you face in this era of dwindling fiscal resources. Now, more than ever, we need your wisdom, your perspectives and your experiences, your sense of what is right, and your strength in helping us to achieve our mutual goals.

Keep your vision high and strong. Believe me, it is our vision, too. Because of your vision, hard work, dedication, and compassion, there are children, youth and adults with disabilities who will learn to have a new sense of self-worth, of honor, and pride. As a direct result of your efforts, these children will have unparalleled opportunities to participate in neighborhood, school and community life.

I thank each of you for your hard work, and for your strong advocacy efforts. I pledge my support, and that of Dr. Schrag and the rest of the staff in OSERS, to help you in bringing our collective vision into being.

Thank you for inviting me to be with you today.

MULTIDISCIPLINARY APPROACHES

The Growing Need for Multidisciplinary Collaboration for Students with Disabilities

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University of Kentucky, Lexington

Concerns regarding the need for professional collaboration is emerging at local, state, and national levels. In response to this emphasis, a forum was held in Washington, D.C. to explore collaboration as a key issue in special education. This paper reflects the result of discussion by a representative gathering of personnel development specialists and special educators from all parts of the country.[1] The two-day discussion focused on how current collaborative efforts might be made more effective in addressing the changing needs of special education in the 1990s. The purpose of this narrative is to report the outcomes of that discussion in terms of multidisciplinary collaboration as an emerging trend in special education and the implications for personnel preparation.

Defining the Issues

The needs of many special education students, including those mandated by the requirement for multidisciplinary assessments and the related services provision of PL 94-142, have led to a search for more effective models for meeting these needs. This search has been driven by several factors:

1. continuing increases in the range and complexity of conditions experienced by individual learners, including the following:

    * emergence of new medical conditions such as HIV infection

    * changes in medical technology and medical practice

    * consequences of prenatal toxicities including those arising from excessive use of crack cocaine, alcohol, and other substances

    * dysfunctional parenting by absent, addicted, neglectful, or abusive caregivers, and

* social conditions such as homelessness and poverty;

2. increased understanding of, and attention to the needs of learners over greater portions of their lifespans, including infancy and early childhood and the period of young adulthood, when transitions from school-to-work are being made;

3. increased awareness of the inadequacy of any one profession, discipline, or human service agency to address the range and complexity of needs presented; and

4. commitment to operationalize such professed values as "normalization", "mainstreaming", and "least restrictive environment" in home, school, and community.

Alternative Solutions

Evolution of Collaborative Models

Initial attempts to address the many needs of learners resulted in a multidisciplinary approach (multi meaning many). Stylistically represented in Figure 1, this "medical model" approach, in recognition of the complexity of an individual's needs, uses a number of professional disciplines to address those needs. Typically, in this approach, each discipline works independently in a "hands-on" manner with an individual, frequently in segregated

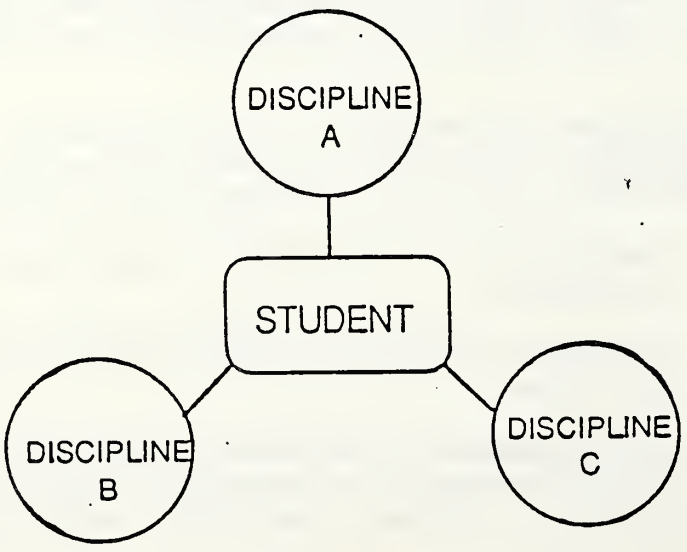

Figure 1
Multidisciplinary Approach

(All figures are adapted from Giangreco, York, & Rainforth, 1989.)

settings. Traditional speech therapy, where a student is removed from a classroom for several therapy sessions a week, is representative of this approach. Many "pullout" programs, such as resource rooms, also typify the multidisciplinary approach.

Interdisciplinary approaches (inter meaning between, among, or reciprocal) explicitly attempt to deal with the isolation of the various disciplines engaged with a particular student by requiring or promoting communication among the disciplines. For the most part, the services continue to be provided to the learner in a direct and often segregated manner. But each discipline shares information with the others involved with that student. Thus, for example, the speech therapist communicates the goals of a child's speech therapy to the resource room teacher and to the child's regular teacher. The resource room teacher shares assessment results with each of the others involved with the student. The classroom teacher provides input to the others regarding observations of classroom progress or lack thereof. In common with the multidisciplinary approach, the interdisciplinary approach is referenced to, and driven by, the orientations of the individual disciplines. Frequently, the ensuing competitive or individualistic professional interactions result in uncoordinated, inconsistent, or nonintegrated services (Giangreco, York, & Rainforth, 1989). A representation of the interdisciplinary model is presented in Figure 2.

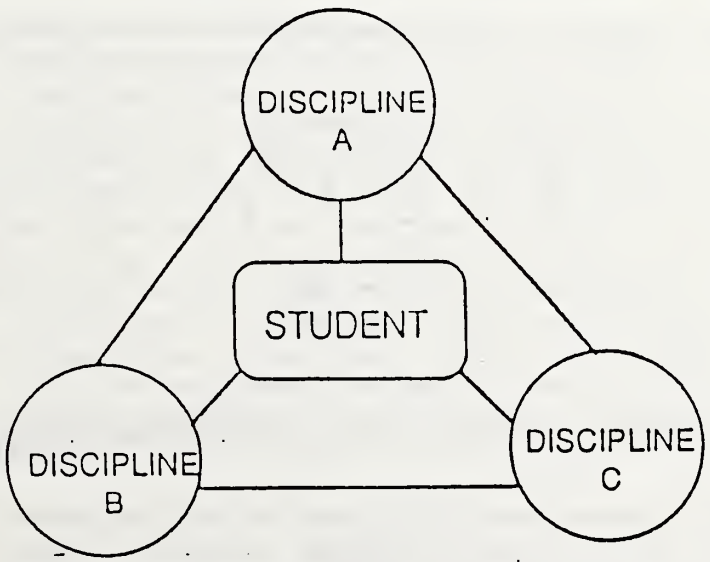

Figure 2
Interdisciplinary Approach

A transdisciplinary approach (trans meaning across or beyond) transcends the individual professional disciplines of which it is comprised. In this model, all involved professionals agree that the major goals are learner-driven and entail age-appropriate learner self-development toward integrated participation in society. All disciplinary activities -- assessment, intervention, or evaluation -- are supportive of these learner-based goals, and serve instrumentally toward their attainment. Thus, the student is not seen as being in school to receive speech therapy, reading instruction, occupational therapy, etc. Rather, these disciplinary activities are carried on to support the student's chances of integrated life outcomes. By focusing on long-term student outcomes, this approach is compatible with the values of "least restrictive environment" in both school and the world of work.

Such a perspective ensures sharing and learning by members of all the disciplines involved, and significantly enhances the accomplishment of stated client goals. Fragmentation and unnecessary overlaps are minimized (Copeland & Kimmel, 1989). While some obstacles still present a challenge (e.g., role confusion, accountability for therapy time, decreased therapist direct services) according to York, Rainforth, & Wiemann (1988), recent research offers a beginning point for understanding the teamwork required with respect to such issues as role identification, client eligibility, criteria, and authority issues (Giangreco, 1990). The transdisciplinary approach is schematically presented in Figure 3.

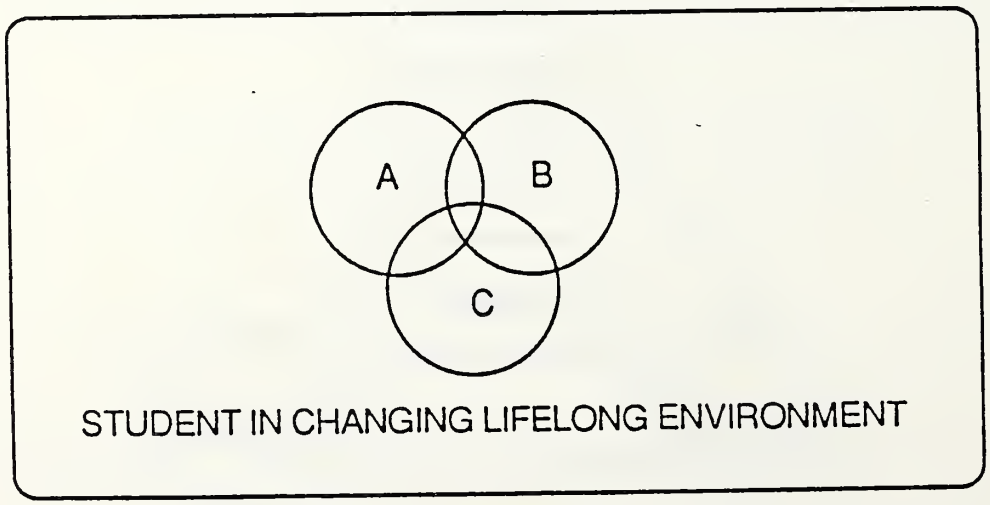

Figure 3
Transdisciplinary Model

The three approaches discussed here all center on the learner. Ideally, all partners in the collaboration will address the question, "What does it take to make this individual learner an effective adult?"

Collaboration is vital between regular and special education, and in recent years it has become increasingly important to extend the collaborative partnership to include parents, the medical community, mental health, court services, and other non-school affiliations. The key issue, then, is collaboration among all disciplines involved in providing services to learners. Since the discussion here focuses on the learner in relation to education outcomes, it seems practical that some one person in the school (e.g., the principal) take a leadership role in managing interagency efforts.

In the transdisciplinary approach to collaboration, it is vital that all involved persons are equal partners. This means that special educators should continue to be active in providing direct services to learners rather than to become consultants or "tellers of others." No single discipline should dictate or control the activities of any other. Rather, all disciplines and agencies must work toward shared goals that are based on the client's needs, with recognition and respect for one another's expertise, ethics, and resources. Further, because learners with disabilities need a vast array of supports, the leader (e.g., building principal) will need to solicit that support from service centers, parents, businesses, and other agencies.

Inhibitors to Obtaining the Ideal:

Barriers to Collaboration

A multitude of inhibitors exist between current practices and attainment of the ideal, which is defined as teachers, administrators, and all significant others being thoroughly trained in all aspects of multidisciplinary collaboration and are able to work effectively in a group process. Included among the barriers to effective collaboration are two that are particularly important: (a) special educators often are asked to go beyond the services they are trained to provide; and (b) education is expected to deliver services it does not have resources to support. These two situations often may occur as a result of not having all of the necessary disciplines involved in planning. Thus, leadership in the early stages of planning is critical.

Many administrative training programs do not emphasize building-level, decision-making models which facilitate education administrators being effective in the role of building manager. In addition, personnel development

specialists and educators who were involved in Forum discussions of this issue believe that workshops and seminars will not effect needed changes in building level management. To be successful in a transdisciplinary approach, the building administrator must be trained and able to carry out democratic and participative management of all individuals necessary to full collaboration.

Strategies for Moving Toward the Ideal

The strategies listed here were generated in a nominal group process conducted with personnel development specialists in the field of special education. These strategies are presented in four categories: (a) Research and Analysis; (b) Systems and Policies; (c) Training; and, (d) Implementation and Best Practices.

Research and Analysis

* The Division of Personnel Preparation application review process does not currently allocate points to specifically reward projects that emphasize collaborative activities, although requests for proposals (RFPs) often encourage collaboration. Discussants in this forum suggested that points be awarded to those personnel preparation applicants that propose to demonstrate a transdisciplinary approach to collaboration.

* Research should be conducted on what has actually happened as a result of previously implemented policies that mandated the inclusion of special education content in regular (or general) teacher and administrator preparation programs. This can be conducted in those states where such training is mandated for teacher certification and also in individual institutions of higher education (IHE) where the training is program-policy-based.

* Conduct research on the efficacy of mandated merged preparation programs.

* Investigate what makes the effective building administrators effective. These studies would help to identify the behaviors, attitudes, and values of administrators targeted as being noticeably effective in promoting inclusive programs of education.

* Research designed to examine where we are on equality issues is needed. Since true collaboration can only occur if all persons involved are equal partners, it is important to have current state-of-the-art answers to questions such as, "Is there equality among building team members -- including parents?"

Identification of those skills necessary for individuals to be able to function effectively in collaborative activities is needed. Without such a data base, skill development will most likely be haphazard.

* Jargon which is discipline-specific often acts as a barrier to communication in planning and collaboration. Therefore, the special terminology used by the disciplines involved should be identified, compared, and defined. "Jargon lists" should be prepared to assist those involved in the collaboration to understand and "speak the language" of other disciplines with which they are trying to work.

Systems and Policies

* Incentive systems to reward those who participate in collaborative activities should be developed. Such incentives as lower pupil-teacher ratios or additional resources, either human or monetary, could be offered to compensate for extra time and effort spent by individuals who collaborate across disciplines.

* Special education content resources should be made available for non-special educators. These materials could be designed specifically to assist the non-special educator in collaboration involving special education students.

* Much emphasis has been placed on accommodating individual differences of students in the classroom -- particularly in the field of special education. Often, this approach is not modeled by instructors in teacher training programs at institutions of higher education as they conduct their classes for teacher candidates. Modeling the accommodation of individual differences through university teacher training programs for regular educators, as well as special educators, would create a base of

understanding for regular educators to take with them into collaborative situations.

* If research shows existing programs to be effective, the Division of Personnel Preparation should be encouraged to designate funding for projects demonstrating merged preparation programs. This "seed money" is important for giving a new approach time to become accepted and then institutionalized.

Training

* Teacher certification remains heavily dependent on education training as the only way to enter the field of teaching. Non-traditional training routes should be investigated. For example, nurses might be employed to work as educators for severely mentally disabled and medically fragile students.

* Experience is often the best teacher, especially for potential educators. Collaborative experiences in preservice practicum settings for both regular and special education teacher candidates should be provided.

* Personnel preparation programs should be designed to include training about cultural diversity and the characteristics of culturally-based value systems. Skill in this area can play an important role in collaboration.

* Basic national coursework standards should be developed across major disciplines for all persons who will work with individuals with disabilities. This could be piloted in several states and then used as a tool to promote training consistency across all states.

* All personnel (teachers, administrators, and support personnel) should be required to participate in structured family and field-based experiences that:

  1. identify survival and development needs of students at each stage (infancy, preschool, elementary, secondary, and adult);

  2. identify existing disciplines, programs, and agencies that address those needs; and

3. evaluate the relationship between student needs and the agencies able to address those needs, with a view to modify, supplement, coordinate, or create new and/or more adequate ways of meeting identified needs.

* Impact evaluation and follow-up after in-service sessions should be promoted to assist and "fine tune" implementation. Thus, specific step-by-step follow-up instructions for classroom "back-on-the-job" application should be provided.

* Models of collaboration which train people to be on both the giving and receiving end of advice and consultation should be identified or developed. The ultimate goal of training, then, will be to prepare people to be effective in all roles of collaborative work.

Implementation

* Persons should be assigned to jobs or roles according to the best use of their skills. This, again, targets individual differences. There are certain personality styles that are more naturally suited to performing those skills necessary to ensure effective collaboration.

* Regulations that govern the individualized education plan should be made more flexible in order to permit community agencies to provide related services. Arrangements should be for schools to serve as centers for accessing community services, and ultimately become school-based human service providers.

A Model for Collaboration: Transdisciplinary Services for Children with Emotional/Behavioral Disorders in Kentucky

Many of the suggestions made in this paper are being tried in a variety of forms and in different settings across the nation. The following is one example of a transdisciplinary approach that is being implemented in a 17-county region of Kentucky with students with emotional/behavioral disorders (EBD).

In 1986, Kentucky was like many other states in terms of services to special-needs children. Although it was estimated that 51,000 children (5% of the child population) were eligible for community mental health services, only 10% of this group were receiving those services. Furthermore,

less than 0.4% of the school population was identified and served in public school programs for EBD pupils. At the same time, an alarming increase in the growth of private psychiatric hospitals was taking place, from 74 beds in 1980 to 500 beds in 1989. In rural areas especially, services for EBD children were piecemeal, fragmented, or totally lacking. The only services available for many families consisted of private psychiatric placements that, in many cases, were inappropriate, overly restrictive, and exorbitantly expensive.

Beginning in the late 1980s, a climate for change was created by several events: the State Department of Education sponsored a study of groups of students with disabilities in the schools who were significantly over- or under-identified in terms of expected prevalence rates; new guidelines for identifying and serving EBD pupils in the schools were developed by a multi-agency task-force; state level administrators established collaborative relationships across disciplinary boundaries; a legislative mandate was established to develop a plan for serving seriously disturbed children (which was to include coordinated interagency service structures); and the central Kentucky region obtained a foundation grant to support the development of interagency services for EBD children and their families. This project, called the Bluegrass Interagency Mobilization for Progress in Adolescent and Children's Treatment (Bluegrass IMPACT), will serve as a model for the development of interagency services to EBD children and their families throughout the state.

Bluegrass IMPACT is an interagency project designed to maintain children with serious emotional or behavioral disorders in their homes and local communities through the provision of individualized multi-agency services to targeted children and their families. Community-based services are coordinated through an interagency team, drawing from resources available in the community or region. A local resources coordinator is responsible for the planning, implementation, and evaluation of all local services; however, individual case management is provided by a community interagency planning and implementation team (CIPIT). The CIPIT develops case goals, designs and modifies implementation strategies, and monitors client progress. A computerized tracking system is used to report case data to the local resources coordinator, who reports monthly to a regional . . . council (RIAC). If more intensive services, or services not available in the family's local community are needed, the RIAC may purchase these through a pool of wrap-around funds generated from grants and blended agency funds. A state interagency council (SIAC) is established to set policy, advise RIACs, review cases, evaluate the effectiveness of regional

services, advocate for services, and advise the governor. While only in its first year of operation, Bluegrass IMPACT already has made great strides toward developing a coordinated system of services to children and families who previously had services that were inadequate and disjointed. An early accomplishment of this project has been the signing of interagency agreements between human services agencies and the 23 school districts in the 17-county, central Kentucky region.

References

Copeland, M.E. & Kimmel, J. R. (1989). Evaluation and management of infants and young children with developmental disabilities. Baltimore: Brookes.

Giangreco, M. F. (1990). Making related service decisions for students with severe disabilities: Roles, criteria, and authority. Journal for the Association for Persons with Severe Handicaps, 15(1), 22-31.

Giangreco, M. F., York, J., & Rainforth, B. (1989). Providing related services to learners with severe handicaps in educational settings: Pursuing the least restrictive option. Pediatric Physical Therapy, 1(2), 55-63.

York, J., Rainforth, B., & Wiemann, F. (1988). An integrated approach to therapy for school aged learners with developmental disabilities. Totline, 14(3), 36-40.

Footnote 1: Participants in the Multidisciplinary group discussion were Nettie Bartel (PA), Jan Allen Beck (KS); Ted Beck (MI); Hans Hahn (WI); John Kincheloe (ND); William Malloy (NC); Carolyn McPhearson (TN); C. Michael Nelson (KY); Daniel Sage (NY), and Richard Simpson (KS).

INTEGRATION/INCLUSIVE EDUCATIONAL OPPORTUNITIES

Personnel Preparation For Integration & Inclusion: A Proposal For Improving The State-Of-The-Practice

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Reynolds and Birch (1982) have observed that the entire history of special education can be summarized as one of "progressive inclusion." Such inclusion has not always been smooth. Many within and out of the field have challenged implementation efforts for practical and philosophical reasons. In whole, however, integration and inclusion have been not only a distant goal but a working reality for tens of thousands of youngsters with disabilities. In this paper, a paradigm for improving personnel preparation with the ultimate result being enhanced student learning in integrated and/or inclusive environments is proposed.

Defining the Issue

How Does Personnel Preparation Impart "Progressive Inclusion"? First, it is important to consider integration and inclusion as separate from least restrictive environment (LRE). Philosophically, as well as practically, LRE implied a continuum of educational settings (regular classroom to special school, special class) from which one setting is selected for the student with the intent of promoting educational benefits. Integration, as described by Reynolds and Birch (1982), means that, <u>at a minimum,</u> students with and without disabilities share common space within a variety of environments. These environments become more inclusive as students share social, instructional and the full range of "living" experiences. At some point all students are included in a societal system or at least are integrated into that system.

Of the many driving and restraining forces that affect the quality of special education within integrated and inclusive settings, perhaps personnel preparation is the most critical. Special educators by and large have been prepared to be separate educators. Undergraduate and graduate students are taught to be effective deliverers of instruction in non-inclusive settings. Since inception, special education has been implemented outside or away from

regular education. The students, at minimum, are pulled out of their regular classroom to receive their special education services - academic, occupational/physical therapy, speech and language, vision, hearing, or whatever.

Ironically, we are only just learning to be effective deliverers of instruction in inclusive settings. If effective and inclusive are criteria for our trade, then we need to become more attentive to the social validity of our practices. However, more and more of these services are being brought into regular classrooms in the form of infusion. The specialists are tailoring the needed program to be implemented functionally within the regular curriculum. For example: a student who needs fine motor exercise may use an adapted penmanship curriculum where the exercises have been infused into the daily learning activity. At one time this student would have been removed from penmanship to receive direct therapy for 30 minutes once a week. The student now receives therapy each day while also receiving the benefit of the regular curriculum with his peers.

In summary, if the field is to move toward progressive inclusion, and if services delivered in integrated and inclusive settings are to be effective for students with and without disabilities, then the methods and content of personnel preparation must evolve. The ultimate goal of personnel preparation must be to promote and develop independence or self-sufficiency in students served.

Moving Toward the Ideal

Personnel preparation is one part of a system of services designed to help children learn to function as independent and productive adults. Resources designated for personnel preparation at varying times and to varying degrees flow with, guide, follow, or push other efforts (e.g., service delivery, research) in a particular direction.

Teacher-Focused Preparation

Typically, personnel preparation is considered in a teacher training framework. Individual teacher preparation is the initial front line activity that supplies the field with teachers. If these teachers are expected to adhere to the philosophies of meaningful integration and inclusion, they must be provided the skills to actualize them in practice. For example: teachers (general and special education) will need strategies in cooperative learning, task analysis in all domains, and interagency collaboration.

School and District-Focused Preparation

While teachers-in-training are the most obvious target of personnel preparation programs, school or district units may need training regarding theory and practice in the areas of integration and inclusion. Parents are a vital component when considering schools as units for purposes of training.

State and Federal-Focused Preparation

Personnel preparation appears less like teacher training as the training targets become more removed from the classroom setting, such as, state directors, finance personnel, and legislators. However, these are critical personnel in setting the direction in areas of policy and procedure. For example, many states support special education through categorical funding with higher supports for self-contained than resource students. Directors who are supportive of meaningful integration and inclusion may include requiring a course on effective integration for regular and special educators, disseminate current information to schools and parents, and provide state funds to support creative programs.

Society At-Large Interventions

A basic assumption in personnel preparation is that people can learn to do, think, act, believe, and value in ways they currently do not. In this regard, the citizenry at large is also a training target for personnel preparation. A clear understanding, sensitivity to needs, and opportunities for social interaction will provide a foundation for total integration.

Alternative Solutions: Proposal for Rethinking Personnel Preparation

Personnel preparation influences practice. There are multiple levels of personnel preparation, but ultimately these efforts should touch children in a positive way. For the purpose of this paper, we will focus on five populations of students who benefit from personnel preparation that identifies progressive and meaningful integration and inclusion as an important function:

1. Children whose disabilities are primarily academic in nature;

2. Children whose disabilities are primarily social in nature;

3. Children with a wide range of disabilities;

4. Children in various stages of transition (home to school: preschool to day school; school to community); and

5. Children without obvious or apparent disabilities.

Often these problems overlap such that a student with academic problems may also experience social or behavioral problems. However, for the purpose of clarity, these students are presented as distinct in the proposed model. The proposed model links the various levels of personnel preparation directly to the ultimate consumer of our field: school-aged students. As shown in Table 1, the model is presented as a matrix, enveloped in a social and professional context.

Table 1. Personnel Preparation Matrix for Integration and Inclusion

Levels of Personnel Preparation

Ultimate Function of Personnel Preparation (students whose disabilities are primarily ...)	Teacher-focused Intervention	School and District-focused Intervention	State and Federal-focused Intervention	Society-at-large Intervention
Academic in nature	Co-teach regular and special ed.	Technology committee works with curriculum adaptation	Fund pilots on full integration	Symbols with words on signs
Social in nature	Integration of management plans into natural routine	Train for ecological factors which impact behavior	Policy supporting full integration of services	Cooperative games intramural sports
Full Range of disabilities	Transition curriculum	Co-train regular & special educators in integration/ inclusion for classroom	Advocates for integrative/ inclusive philosophy	Commercials with successful models for disabled
No Obvious Disabilities	Acceptance of differences at an early age	Stresses strengths and inclusion of all people	Fund projects serving integrated populations	Raises a generation of students who see similarities in people
Students-in-transition	Interagency collaboration	Develop transition curriculum via committee of interagency participants	Technical assistance	Interagency/ business conferences on employment

The development of needs for personnel preparation as they relate to integration and inclusion can be considered in a cell-by-cell fashion. For example, the cell in the upper left corner of the matrix suggests that there are specific teacher training actions necessary to teach students with academic disabilities in integrated or inclusive school settings. Moving across the top, other levels of personnel preparation are evident that would also have a positive influence on students with academic disabilities in integrated or inclusive settings. Examples of specific personnel preparation actions generated by the focus group are found in each cell. This matrix does not exist in isolation; there are complex contextual variables, societal goals, professional standards, economic realities and other facts that influence personnel preparation actions within the matrix. An example of a contextual variable is the degree of integratedness of the practicum sites to which students are assigned.

In conclusion, the matrix is offered as a model to generate variables to be considered when viewing integration and inclusion within the context of the various handicapping conditions. It can serve to stimulate thought regarding curriculum and training at various levels of service delivery.

References

Reynolds, M. & Birch, J. (1982). Teaching exceptional children in all America's schools. Reston, VA: Council for Exceptional Children.

Issues Related To Integration/Inclusion

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The consideration of the concepts of integration and inclusion as they relate to the preparation of personnel to work with individuals with disabilities has involved a circuitous route. An analysis of these concepts include issues regarding historical perspectives, debates over definition, and philosophical implementation. Each of these issues will be discussed with the focus on recommended solutions for addressing the problems associated with training and implementation.

Defining the Issue

The passage of PL 94-142, the Education for All Handicapped children Act of 1975, initiated the implementation of public policy which addressed the educational rights of individuals with handicaps. The Act also initiated a vigorous national debate over what constitutes the "education" of persons served by this legislation. Part of this debate focused on the " mind set" of service delivery options created by almost two decades of providing services based on a continuum predicated on a least restrictive-more restrictive model. The question of what constituted "least restrictive environments" (LRE) emerged. Subsequent discussions focused on redefining the continuum of services and the debates now included references to "regular/general education initiative" (REI/GEI) and integration/inclusion (Jenkins, Pious, & Peterson, 1988; Kauffman, Gerber, & Semmel, 1988; Lipsky & Gartner, 1987; McKinney & Hocutt, 1988; Reynolds, Wang, & Walber, 1987; Stainback & Stainback, 1987; Wang & Walverg, 1988; Will, 1984, 1986). The focus also included individuals with moderate to severe disabilities (Taylor, 1982).

Definitions/Philosophical Perspective

Of concern in these debates is the need to clarify what the field means as it discusses service delivery options for

persons with disabilities. Such clarification is necessary if training issues and skills are to be addressed. If the field accepts the notion of a continuum of services across a variety of settings, training skills would necessarily prepare individuals to work in specific environments with some understanding of what occurs in other service environments. If the field chooses to limit the continuum of services to those services provided only within a regular education environment, then training issues and skills take on a different dimension. The latter approach necessitates considerable emphasis on consultation skills and collaboration between regular and special education personnel. At the very least, training environments and possible certification issues would need to be re-examined. Related issues include questions of amount of integration/inclusion, curricular issues, and parent participation.

Resolution of these issues will not be easy. The literature reflects the perspectives of thoughtful individuals. The Council for Children with Behavioral Disorders (CCBD, 1989) issued a position paper questioning the assumptions upon which the REI initiative is based and reaffirming the need for an array of service options. Advocates for individuals with severe disabilities argue strongly for inclusion and integration of these persons in regular education environments. Gent and Mulhauser (1988) contend that some have failed to differentiate between the legal doctrine of least restrictive and the educational perspective of least restrictive programming.

Even if one accepts the notion of total inclusion/ integration, disagreements exist. Taylor (1988) suggests a community-based LRE continuum model rather than the traditional model which is ordered by a sequence of placements according to degree of restrictiveness. His argument is based on considerations for individuals with severe disabilities. Brown, Schwarz, Udvar-sooner, Kampschroee, Johnson, Jorgensen, and Gruenewald (1990) address the question of how much time students with severe disabilities should spend in regular classrooms. They list a number of reasons why these individuals should spend some but not all their time in regular classes, yet point out that others hold to the view that persons with severe disabilities should spend either no time in regular classes or all of their time in regular classes.

Public Policy and Research

Underlying the question of personnel preparation within the context of integration/inclusion is the issue of the relationship between public policy and research. Should public policy be driven by philosophical perspectives or by a knowledge base which is founded upon research? If the

former, then integration/inclusion is a concept which must be made to work. If the latter, then selected efforts need to be made which address a multitude of questions which validate the concept for a variety of individuals. Only then would proven practice become public policy. Inherent in the positions of the individuals who argue the pros and cons of integration/inclusion and the parameters of LRE is the need for "more information." Each perspective challenges the other to demonstrate the efficacy of its position (Fuchs & Fuchs, 1988; Wang & Walberg, 1988). The federal government supports personnel preparation. The decision to establish training priorities within the present environment of unresolved debate should be taken seriously.

Moving Toward the Ideal: Considerations Affecting The Implementation of Integration/Inclusion

Inclusion in the mainstream guarantees neither individualized nor appropriate education. The only thing inclusion guarantees is placement -- physical placement next to students without exceptionabilities. Physical placement, however, was not the conceptual base for Public Law 94-142. The foundation of this law was to provide an appropriate education for children and youth with disabilities in the least restrictive environment. Advocates for total inclusion assume that the least restrictive environment is the same for each child -- the general education classroom. These advocates must be cognizant of several variables related to inclusion. These variables include, but are not limited to teacher preparation and inclusion implementation.

Teacher Preparation

Currently, regular and special education are offered as two distinct programs in most universities; often they act as parallel programs. The current system of educating general and special educators apart keeps each group from reading the others' literature, from sharing the others' methods and techniques, and most importantly, from developing an accurate understanding of children (Feden & Clabough, 1986; Lortic, 1978; Panko, 1984). This disjointedness also fosters the perception that there are two distinct types of children: those who belong with special educators and those who belong with regular educators (Stainback & Stainback, 1984).

As they currently exist, the administration of both special and regular education preservice programs is problematic. Special education preservice generally offers categorical instruction to students, which results in duplicity. For example, students majoring in learning disabilities and those majoring in mental handicaps may

learn identical instructional and behavior management methods in different classes, classes specially designed to meet the unique needs of students with these disabilities. It has been documented repeatedly that few, if any, generalized behaviors are specific to any one group of students with disabilities, particularly those considered mildly to moderately disabled (Hobbs, 1975; Neisworth & Greer, 1975; Scruggs, & Mastropieri, 1986; Smith, Osborne, Crim, & Rhu, 1988).

Regular education preservice proffers the notion that one curriculum which is system-dictated will meet the needs of their students -- with little or no focus on individualization (Lieberman, 1985). General educators also recognize that preservice training does not meet their needs relative to students with disabilities. To successfully manage and instruct students with disabilities in their classes, regular educators delineated certain types of training as mandatory: in-service training in behavior management and strategies, and college coursework in special education (Phillips, Allred, Burlle, & Shank, 1990). Educators also acknowledge that one-shot in-service or exposure to a new concept is not enough to ensure teacher mastery and application (e.g., Holmes Group, 1989).

Clearly, in regard to teacher preparation, reform is needed; specifically, as it relates to developing integrated general/special education preservice programs and recruiting quality educators. Reform has been attempted, but has not been successful in providing cross-training of regular and special education teachers (Lieberman, 1985).

Inclusion Implementation

Inclusion appears to be a philosophically and idealistically sound idea. What educator would not support a system that purports to meet "the unique needs of all students within one unified system of education -- a system that does not deny differences, but a system that recognizes and accommodates for differences" (Stainback & Stainback, 1984, p. 109)? However, the practicality of implementing total inclusion at this time is not supported by what we know about best practices.

It is not known how or whether children and youth with disabilities will be impacted by inclusion. Elementary level programs (e.g., Adaptive Learning Environments Model) that have attempted total inclusion are fraught with methodological problems that preclude sound interpretation of student impact (Heller & Schilit, 1987). Likewise, there is a paucity of direct evidence on the effects of totally integrated secondary programs (Schumaker & Deshler, 1988). Even service delivery systems which have been touted to facilitate inclusion (e.g., collaborative consultation) are

not supported by sound research. That is, between 1979 and 1988, only four empirically-based studies exist which support the collaborative consultation model. Even these studies have methodological problems which preclude replication and precise interpretation (Huefner, 1988).

Presently, information concerning the impact inclusion has had on general education students has not been clearly delineated. Little is known about the impact of increasing the number of students with disabilities in general education classrooms on standard curriculum mastery by normally-achieving students (McKinney & Hocutt, 1988). A means must be found to ensure that all students, not just students with disabilities, profit from a totally integrated system.

Today's public schools accommodate students with a variety of academic, behavior, linguistic, and cultural differences (Catterall & Cota-Robles, 1988; Stainback & Stainback, 1984). Because of this diversity, the concept of an individualized education takes on greater importance, particularly in the areas of curriculum and individualized education plans (IEPs). The difference between general and special education revolves around curriculum. In general education the curriculum is dictated by the educational system; in special education, the curriculum is dictated by the child. Curriculum issues, such as, when and whether to pursue a functional, vocational, or academic curriculum, becomes more complex when inclusion-related factors are considered. These factors include (a) criteria for curriculum selection, (b) provision of an equitable education for all students in the classroom, and (c) administering curricula across student levels.

IEPs are the vehicles by which individualized education is provided to students with disabilities and, thus, are an important part of the inclusion movement (Smith, 1990). Theoretically, a document which personifies "specially designed instruction", should be incorporated into the dialogue about inclusion. However, specific issues, must be addressed: What is the role of the IEP in inclusion? Will IEPs guide and manage individualized instruction for all public school students (Smith, 1990)? How can IEPs be restructured to meet the intention of the Public Law?

As stated earlier, part of the problem associated with inclusion is the lack of an empirically-sound data base. Financial support, particularly for ongoing research and experimental programs, from Federal and State governments has not been generated. Federal and state legislators could earmark funds to support innovative educational practices (Mesinger, 1985). "They always could. They usually have not, do not and will not vote funds for adequate longitudinal research. Nor will the executive departments

see to it that all the funds voted are actually spent, particularly in research and development" (Mesinger, 1985, p. 511).

Alternative Solutions

Inclusion must be approached systematically. Those who implement a program of this nature must plan their approach carefully, taking care not to "throw out the baby with the bathwater". According to McKinney and Hocutt (1988), practitioners, administrators, university faculty, and research personnel "... must find some middle ground where we can seek constructive reforms in special education" (p. 16). In accordance with this philosophy, the following recommendations are made for government, university and school personnel:

Government

1. Provide federal and state support for experimental trials, particularly those that are data-based, longitudinal, and replicable. Programs that offer a variety of service delivery options should be supported through grants. Programs should include school- and university-based collaboration.

2. Provide federal and state support for programs such as preassessment that provide assistance to students with behavior and learning problems thereby allowing them to remain in the regular education classroom.

3. Provide federal and state support for projects that identify student guidelines or criteria for inclusion.

4. Provide federal and state support for stipends for qualified personnel to continue their education. Support should be given to the following personnel: (a) college freshman who are academically-proficient; (b) recruits from other fields (e.g., business, economics, social sciences); (c) ancillary staff; and (d) practicing teachers desiring to improve skills.

5. Provide federal and state support to train educational personnel in multidisciplinary screening techniques. This will aid in early identification of students with disabilities.

6. Provide federal and state support to develop additional community-based educational options for

students (e.g., supported employment job coaches). These options should be available for students with a myriad of needs.

7. Provide federal and state support to develop more effective teaching practices for students with diverse needs (e.g., cooperative grouping arrangements).

8. Provide information on how inclusion can occur following the guidelines for the now amended PL 94-142.

9. Develop barrier-free categorical/noncategorical criteria consistent across states to assist schools and university personnel in model program replication.

   Note: All federal and state supported programs should (a) require a firm research design, (b) have a careful monitoring system in place, and (c) offer longitudinal funds for programs that meet criteria (a) and (b) above.

University

1. Provide model integrated general/special education preservice programs. Because of past territorial problems, it might be necessary to fund a general/special education department in a few model universities and slowly phase out the traditional general and special education training programs.

2. Place the model preservice training program in the public schools, providing school-based personnel with assistance and allowing university faculty to experience inclusion first-hand.

3. Include ancillary staff personnel in model programs. Ancillary staff and other education personnel need to understand each other's job roles.

4. Work with government agencies to provide noncategorical or multicategorical endorsement system for teachers.

5. Provide incentives for teacher trainers to work in schools on inclusion projects.

School

1. Define the goals and objectives for inclusion. Determine how resources are to be committed.

2. Engage in systematic planning prior to implementation. Seek assistance of university personnel in terms of collecting data, structuring and evaluating inclusion.

3. Provide incentives to teachers who seek additional education to improve their skills.

4. Provide facilities to teacher trainers who wish to work directly with school personnel implementing inclusion.

5. Use curriculum-based assessment to evaluate program efficacy.

6. Develop holistic IEPs that provide each child with an individualized education. Include interagency and regular education personnel.

7. Train paraprofessionals to work in integrated environments.

8. Organize transdisciplinary teams that can provide a system of feedback on student achievement across school, social agencies, and community environments. A liaison between social and rehabilitative services, as well as institutional and hospital settings, must be in place to allow for tracking of student across school and nonschool settings. This will reduce the number of students who "get lost in the system".

9. Enlist the aid of community and business leaders to provide opportunities for students.

10. Develop school- or district-based guidelines for inclusion.

11. Utilize preassessment teams as a means of helping students remain in the general education setting. Ensure that teams do more than merely "paper screen" for special education admission.

12. Foster attitudes that teachers should assist students in gaining independence, problem-solving, and decision-making skills. Teachers should view their jobs as helping students meet their potential, rather than taking care of them

13. Provide teachers with classroom modifications that facilitate inclusion (e.g., in-service, trained paraprofessionals, reduced class size, adequate planning time).

14. Foster active parent involvement. Include parents in all steps of inclusion planning and implementation.

15. Train parents to advocate for their children.

References

Brown, L., Schwarz, P., Utvari-Solner, A., Kampshroer, E.F., Johnson, F., Jorgensen, J., & Gruenewald, L. (1990). How much time should students with severe intellectual disabilities spend in regular education classrooms and elsewhere? Unpublished manuscript, University of Wisconsin and Madison Metropolitan School District, Madison.

Catterall, J., & Cota-Robles, A. (1988). The educational at risk: What the numbers mean. Accelerating the education of at risk students (pp. 6-7). Palo Alto, CA: Stanford University.

Dodaro, G. L., & Salvemini, A. N. (1985). Implementation of P.L. 94-142 as it relates to handicapped delinquents in the District of Columbia. Washington, D. C.: U. S. General Accounting Office.

Executive Committee of the Council for Children with Behavioral Disorders. (1989). Position statement on the regular education initiative. Behavioral Disorders, 14(3), 201-208.

Feden, P. D., & Clabugh, G. K., (1986). The "new breed" educator: A rational and program for combining elementary and special education teacher preparation. Teacher Education and Special Education, 9(4), 180-189.

Fuchs, D. & Fuchs, L. (1988). Response to Wang and Walberg. Exceptional Children, 55(2), 138-146.

Gent, P. J. & Malhauser, M. B. (1988) Public integration of students with handicaps: Where it's been, where it's going, and how it's getting there. Journal of the Association for Persons with Severe Handicaps, 13(3), 188-196.

Heller, H. W., & Schilit, J. (1987). The Regular Education Initiative: A concerned response. Focus on Exceptional Children, 20(3), 1-11.

Huefner, D. S. (1988). The consulting teacher model: Risks and opportunities. Exceptional Children, 54(5), 403-414.

Hobbs, N. (Ed.). (1975). Issues in the classification of children. San Francisco: Jossey-Bass.

Holmes Group. (1989). Forum, 3(30) 1-28.

Jenkins, J. R., Pious, C. G., & Peterson, D. L. (1988). Categorical programs for remedial and handicapped students: Issues of validity. Exceptional Children, 55(2). 147-158.

Kauffman, J. M., Gerber, M. M., & Semmel, M. T. (1988). Arguable assumptions underlying the regular education initiative. Journal of Learning Disabilities, 21, 6-11.

Lieberman, L. M. (1985, April). Special education and regular education: A merger made in heaven? Exceptonal Children, 51(6), 513-516.

Lipsky, D. K., & Gartner, A. (1987). Capable of achievement and worthy of respect: Education for handicapped students as if they were full-fledged human beings. Exceptional Children, 54, 69-74.

Lortie, D. (1978). Some reflections on renegotiation. In M. Reynolds (Ed.), Future of education for exceptional students (pp. 235-244). Reston, VA: The Council for Exceptional Children.

McKinney, J. D., & Hocutt, A. M. (1988). Policy issues in the evaluation of the regular education initiative. Learning Disabilities Focus, 4(1), 15-23.

McKinney, J. D. & Hocutt, A. M. (1988). The need for policy analysis in evaluating the regular education initiative. Journal of Learning Disabilities, 21, 12-18.

Mesinger, J. F. (1985, April). Commentary on "A rationale for the merger of special education" or, is it now time for the lamb to lie down with the lion? Exceptional Children, 51(6), 510-512.

Neisworth, J. T., & Greer, G. T. (1975). Functional similarities of learning disabilty and mild retardation. Exceptional Children, 42, 17-21.

Panko, J. S. (1984). Communication between special and regular educators. (ERIC Document Reproduction Service No. ED 243 851).

Phillips, W. L., Allred, K., Brulle, A. R., & Shank, K. S. (1990). The regular education initiative: The will and skill of regular educators. Teacher Education and Special Education, 13(3-4), 182-186.

Reynolds, M. C., Wang, M. C., & Walberg, H. J. (1987). The necessary restructuring of special and regular education. Exceptional Children, 53, 391-398.

Schlechty, P. C., & Vance, U. S. (1983). Institutional response to the quality/quantity issue in teacher training. Kappan, 65(2), 94-101.

Schumaker, J. B., & Deshler, D. D. (1988). Implementing the Regular Education Initiative in secondary schools: A different ball game. Journal of Learning Disabilities, 21, 36-42.

Scruggs, T. E., & Mastropieri, M. A. (1986). Academic characteristics of behaviorally disordered and learning disabled students. Behavioral Disorders, 11(3), 184-191.

Smith, R. W., Osborne, L. T., Crism, D., & Rhu, A. H. (1988). Labeling theory as applied to learning disabilities: Survey findings and policy suggestions. Journal of Learning Disabilities, 19(4), 195-202.

Smith, S. W. (1990). Individualized education programs (IEPs) in special education - from intent to acquiescence. Exceptional Children, 57(1), 6-14.

Stainback, W., & Stainback, K. (1984). A rationale for the merger of special and regular education. Exceptional Children, 53, 327-329.

Stainback, S. & Stanback, W. (1987). Integration versus cooperation: A commentary on "Educating children with learning problems: A shared responsibility." Exceptional Children, 54, 66-68.

Taylor, S. J. (1982). From segregation to integration: Strategies for integrating severly handicapped students in normal school and community settings. Journal of the Association for Persons with Severe Handicaps, 7(3), 42-49.

Taylor, S. J. (1988). Caught in the continuum: A critical analysis of the principle of the least restrictive environment. Journal of the Association for Persons with Severe Handicaps, 13(1), 41-53.

Thousand, J. S. (1990). Organizational perspectives on teacher education and renewal: A conversation with Tom Skrtic. Teacher Education and Special Education, 13(1), 30-35.

Wang, M. C. & Walberg, H. J. (1988). Four fallacies of segregationism. Exceptional Children, 55(2), 128-137.

Will, M. C. (1984). Let us pause and reflect - but not too long. Exceptional Children, 51, 11-16.

Will, M. C. (1986). Educating Children with Learning Problems: A Shared Responsibility. A report to the Secretary. Washington, DC: U. S. Department of Education.

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EARLY INTERVENTION

Issues in Early Intervention with At-Risk and Young Children with Disabilities and Their Families: Implications for Personnel Preparation

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While the current challenges of preparing high quality personnel to work with young children with disabilities and their families are tremendous, the diversity of those challenges are exacerbated by the forces unleashed by an increasingly complex global society with a multiplicity of cultures and values in a world only recently catapulted into the Information Age. Legislation provides a base for the underpinnings of early intervention programs for youngsters from birth to 8. Yet the reality of preparing personnel to meet the demands of children with diverse disabling conditions and developmental levels, varying delivery systems, different interagency entities, families from many cultures, and the cadre of professionals necessary to operate quality early intervention programs presents us with an incredibly difficult feat. Moreover, programs may be for birth to 3 or 3 to 5 year olds, or some variation of these ages, depending on state decisions, together with a wide range of disabling conditions and developmental levels.

Landmark legislation precipitated changes in public policy more than a decade ago with passage of P. L. 94- 142 (The Education for All Handicapped Children Act). The significant influence of this law resulted in an increasingly diverse school-aged population, and eventually produced a climate where the majority of students classified as disabled receive at least a portion of their instruction alongside regular classmates. Meeting the mandates of P.L. 94-142 sorely tested both the resources of public schools and the classroom skills of general educators, including early childhood educators. But meeting the requirements of P. L. 99-457, passed by Congress in 1986, provides a broad range of new challenges.

P. L. 99-457 extended the federal mandate downward to age 3, making sweeping extensions in services to children and their families. It gave states the option to expand

services to include at-risk children who are delayed or with disabilities from birth through 2 years of age and places a special emphasis on the family. At the same time, P. L. 94-457 called for the expansion of personnel preparation programs to develop a new generation of professionals, schooled in interdisciplinary, family-centered, early intervention services. This legislation also stipulated that each state must create a comprehensive system of personnel development to provide interdisciplinary training at the preservice and in-service professional levels. Preparation, which must include a cadre of paraprofessionals and case managers, must also include direct training of families themselves in order to strengthen children's development and family life. Now, five years after the passage of P.L. 99-457, with recent reauthorization of this law (P.L. 101-476), inspection of our present capacity to meet its requirements casts a pale over our current service delivery systems and personnel preparation efforts.

To date, records show that few states have included early intervention under their Comprehensive System of Personnel Development (CSPD). Other studies reveal that uniform certification standards for early intervention are essentially nonexistent (Bailey, Palsha & Huntington, 1990, Hanson & Lovett, 1990). Further, formal coursework in the area of collaborative interdisciplinary teaming is rarely a part of the modest number of early intervention personnel preparation programs (Bruder & McLean, 1988). While the field is struggling to meet the many demands made upon it, attention to the changes brought about by the impact of technology applications on program staff and on young children with disabilities has received only minimal attention. However, another federal law, P. L. 100-407, The Technology Related Assistance Act, passed in 1988, now being implemented in 22 states, will bring another set of demands for early intervention personnel preparation and more directly, in programs for young children with disabilities.

Universities and colleges, traditionally the institutions that prepare personnel for the programs of interest here, are beginning to meet the challenges. Yet, the current situation is complicated by the fact that institutions of higher education are replete with complex procedural and administrative barriers that effectively inhibit the timely development of interdisciplinary and interinstitutional professional preparation. Development and approval of new courses, whether in working as a part of an interdisciplinary team or in technology applications for young children, take a great deal of time and must move slowly through regular, prescribed channels (Gallagher, 1989).

Defining the Issues

Clearly, significant obstacles must be overcome if society is to realize the promise of the goals incorporated into P. L. 99-457 and P.L. 101-476. A number of early intervention issues pose a challenge to researchers, university training faculty, and practitioners. For example, there appears to be little unanimity regarding the exact population to be served. Nor is there agreement as to what constitutes early intervention. Nevertheless, in spite of lack of consensus, we are not without a road map for early intervention. We must recognize and study the range, variety, and strength of innovative early intervention models funded by the Handicapped Children's Early Intervention Programs (HCEEP) and the Division of Personnel Preparation, housed in the U.S. Department of Education's Office of Special Education and Rehabilitation Services, in regions all over the United States since 1968. Many of these programs have addressed issues related to the requirements of P. L. 99-457, including parent education and participation in children's programs, and have been doing so for more than 15 years. Yet, to many professionals who are unaware of the HCEEP programs, parent education and early intervention practices seem new and are deemed to be in their formative stage.

Technology applications ranging from "high tech" (e.g., computers with alternative input) to "low tech" (e.g., an elastic band to help a child hold an object) make an impressive and positive difference for many young children and their families, but at the present time, most teacher educators and service staff are not prepared to use those applications. Often, when faced with encouragement to learn about technology, early intervention staff are overwhelmed that skills must be acquired in such an unfamiliar area in addition to the other demands placed on them.

Other issues are also important, including the roles of individuals on an interdisciplinary team, the integration of general early childhood courses and faculty with special education early childhood courses and faculty, certification of a diverse range of professionals and many more. Determining whether to use a preservice coursework or in-service structure may rule out other training delivery formats that could conceivably help solve problems related to trained personnel. Clearly, early intervention programs have been operating in communities in some states for many years. Overlooking their contributions and their staff strengths, as well as their needs, would be detrimental in our efforts to move toward implementation of P. L.99-457. Using some of their strengths in assisting universities to provide preservice coursework is often overlooked as is the assistance that could be provided by regular early childhood courses and systems.

Ultimately, we determined that three major areas of early intervention which require immediate attention stand out from the others in our field: (a) family needs, (b) professional preparation, and (c) program development. In succeeding sections we (a) offer an analysis of these issues and discuss the challenges embodied by them, (b) identify some of the inhibitors to achieving ideal early intervention services and (c) propose several alternative solutions that have implications for personnel preparation.

Issues: Inhibitors to Obtaining the Ideal, and Alternative Solutions

Family Needs

Children and their families as well as the greater society are the benefactors when we prepare quality early intervention personnel. Legislators obviously viewed data on early intervention from various sources and found it to be convincing. Families attest to its benefits for their children who often make surprising gains in many areas.

Accumulated research indicates that young children's problems are the outcome of a complex causal chain of biological, familial and/or cultural factors. Notwithstanding the widespread and often contentious debate over these factors, impressive outcomes are produced by early, intensive child and family intervention. For example, there is evidence that early intervention can (a) mitigate against the need for referral and special class placement, (b) reduce significantly the frequency of grade retention, (c) yield substantial gains in physical, cognitive, and self-help skills, (d) reduce family stress, and (e) positively influence both student and parent achievement orientation (e.g., Raver, 1991; Widerstrom, Mowder, & Sandall, 1991). Additional findings demonstrate that early intervention can enhance the psychosocial, receptive, and expressive language repertoires of many young children (e.g., Hendrickson, Gable, Hester, & Strain, 1986). Although less well documented, early intervention reportedly can diminish the negative effects of some of the broader social consequences of poverty, cultural disadvantagement, school avoidance and academic failure (e.g., Riley, 1986; Casto & White, 1984).

The remarkable success of several nationally recognized programs for young children with mild to severe disabilities (e.g., PREP and LEEAP, University of Pittsburgh/Allegheny-Singer Research Institute; RIP, Nashville, TN; Early Intervention Institute, UT State University) further testifies to the singular impact and importance of early intervention. The success of the HCEEP programs nationwide, evidenced by the continuation of early intervention projects with local funding after federal funding ends demonstrates community

support for early intervention. For example, the Macomb 0-3 Rural Project in Macomb, Illinois began as an HCEEP project at a university in 1975 and is still operating, but now in a county rehabilitation program. Many others have been equally successful in continuation.

However, we should acknowledge that findings of some studies conducted on the long-term effects of early intervention have been equivocal at best (e.g., Casto & White, 1984). But this situation only serves to underscore the especially critical role that carefully designed and conducted longitudinal and epidemilogical investigations play in advancing the field.

When we assess the current status of family services, we are confronted with the fact that services, which should be available across a continuum of options, are often fragmented and discontinuous. Ideally, the role of the family varies, depending on the nature of the child's disability, the age of the child, and the family's wishes regarding level of participation. No longer do we "serve" families. Rather, families are to work together with professionals as team members, when families so wish. This shift is not only disconcerting to professionals, but is often ignored or is only given "lip service".

Many times current efforts are fraught with "value clashes" between representatives of various professional disciplines and families. Values may be widely disparate. Cultural and language differences between service providers and service recipients are not uncommon. Conspicuously absent is an integrated, sustained service delivery system that originates from the perspective of the family and its members' needs and strengths. To remedy that shortcoming, services must be initiated that take into account the "goodness-of-fit" between family and the child and his/her ecosystem, including all persons indigenous to the child's natural environment (e.g., parents, siblings, extended family members).

Obstacles to change. The emergence of service systems predicated on interagency and cross-disciplinary sharing of treatment goals and responsibilities, although occurring in some sites, has yet to occur in many. While by no means the only inhibitor, service providers must be educated to relate more effectively to children with disabilities and their families. To do so not only necessitates resolving problems that arise from the multi-disciplinary nature of our service systems which reflect multiple treatment approaches, each bound to a particular professional discipline, but also requires an acceptance of families who hold different values than the service provider. Service providers must learn to function as effective members of an intervention team rather than as isolated and autonomous individuals.

Alternative solutions. Resolution of the aforementioned issue rests, in part, with "retooling" of each of the disciplines involved in early intervention. Professionals must not only be taught to better recognize and to be more sensitive to the problems of families of children with disabilities, but to working with them as members of the early intervention team according to family wishes. This means additional in-service or content, as well as changing the way educational institutions approach teaching knowledge and skills related to families.

We must also be ready to provide a greater variety of options for families which means that personnel preparation must move beyond the concept of professionals providing group meetings for families to activities that families request. For example, families of children who use technology often learn and use a wide range of technology applications, such as word processing, themselves. This not only increases their ability to help their child, but gives them new or extended job skills. Families sometimes request opportunities for social interaction rather than "educational" meetings. Families must be involved in determining content of group meetings rather than having professionals announce the schedule and content of the year's meetings.

Attention to the literature regarding "adult learners" also provides early intervention personnel with strategies for working more effectively with families. While service providers who work best with children may not be the same people who work well with families, all should develop skills in working with adults. Early intervention goals are not best met by having one staff member whose sole role is to work with families while another works only with children. Providing preservice students and in-service workshop attendees with well-supervised, simulated or "real life" assignments with willing families and family groups is likely to increase learner skill and empathy. Perhaps this can also be accomplished by specifying that some segment of training for all professionals must include time in the homes of willing families under conditions that require trainees to assume a significant amount of responsibility for managing children's daily routine (e.g., bathing, feeding, play time, preparing for sleep). Respite care is a pervasive family problem which could also be addressed with this practice.

One strategy that might help professionals work more effectively with individuals from other professions, cultures, and value systems is to explore their personal belief systems. Exploring the many individual beliefs about the nature of disabling conditions may prove useful in reaching a more harmonious relationship between professionals and families of young disabled children.

Another solution is to dismantle barriers that have long separated various professionals and thwarted attempts to elevate the quality of services to families. However, this action alone is not enough since "problem recognition" is necessary. The movement toward transdisciplinary teaming in early intervention programs addresses the dismantling of professional barriers. During the decade of the 1980's, many early intervention programs across the country received extensive in-service on transdisciplinary team roles and functions. However, this content often is translated into reading, lecture, and discussion when it reaches the university classroom inhabited by preservice students preparing to work with young children. Simulations, multimedia learning activities, and live interaction with various professionals would provide students with both skills and attitudes necessary to work with other professionals when they begin teaching.

Educational institutions must examine the strategies they use at both the pre- and in-service level in helping students and personnel already in the field acquire skills in working with families. Attention to learning environments that encourage students to work on "real life" situations and solve problems using the best we know about interpersonal relationships requires a different kind of college course, one that is not exclusively based on lecture.

Professional Preparation

In further deliberating over the issue of professional preparation, we reached consensus that both discipline-specific competencies and early childhood/special education-specific knowledge and skills exist. Although a functioning transdisciplinary team shares some common understandings, some of us felt that it does not necessarily follow that a so-called "seamless" delivery system which obliterates distinctions between various professional disciplines is called for. Others of us would opt for efforts to attain such a delivery system, at least across selected disciplines, in spite of the difficulties and hazards.

Nevertheless, we all agreed that ultimate ownership of and responsibility for training on discipline-specific competencies should be retained by professional organizations and their membership as well as professional schools. However, these entities must maintain meaningful and ongoing dialogue with each other regarding discipline-specific competencies necessary for professional early intervention staff so that each is aware of the position and skill areas the other deems essential, and so that appropriate changes and additions (e.g., new technology applications) are made where it is to the benefit of children, families, and programs. A static narrow view

within organizations will not produce the results called for by P. L. 99-457 and P.L. 101-457.

Obstacles to change. We realize that the integrity of each of the disciplines that participate in the early intervention process must endure each discipline's autonomy. Yet, without dialogue with others, problems related to both personnel preparation and service delivery will develop. The inability to gain some timely common understanding regarding the nature of the problems inherent in the situation and of basic intervention skills is a major inhibitor to improving services. While some argued that competencies specific to Early Childhood Special Education (ECSE) might well constitute a basic license or certificate for all those professionals who complete a common ECSE core, others argued that only carefully selected elements of the ECSE competencies should function in this manner.

While qualified early intervention staff are scarce, so are experienced and qualified faculty members at the university level. Throughout the country, efforts to produce doctoral level early childhood personnel with unique intervention skills, and hopefully, experience, are underway. But at the present time, there are insufficient personnel to meet the need.

Operating in an environment of interagency coordination requires skills that early intervention administrators and staff may not demonstrate easily. The number and variety of skills expected from early intervention personnel in this area are sometimes overwhelming to single individuals!

Alternative solutions. Assuming for the moment that there is some legitimacy to the proposition that all early intervention professionals exhibit a set of common competencies, the question arises -- what content or courses should comprise this set of common competencies? Several courses seem obvious: Introduction to Early Childhood; Ecological Assessment of Infants and Young Children with Disabilities; Child and Family Intervention; Language Development and Involvement; and Field-Based Practicum. Our discussion led to agreement that preparation might also include: Working with Families of Exceptional Children; Strategies for Interpersonal Problem Solving/Conflict Resolution; Multicultural Education; and Emerging Technologies. Further, professionals are increasingly aware of the need for more comprehensive training in the areas of prenatal exposure to drugs, alcohol, medical/developmental disorders, and other special health needs. Accordingly, ethical issues surrounding intensive and even life-sustaining treatment of newborn, infants, and young children must be examined critically from a transdisciplinary perspective.

As a partial solution, it is proposed that the usefulness of a transdisciplinary training model be explored, a model that reflects (a) generic skills -- common to all disciplines; (b) core skills -- those which are shared by professionals involved in common aspects of treatment and prevention, and (c) specialization skills -- those that relate to single disability areas and/or program functions. Developing innovative formats to deliver content rather than the traditional university course might better serve personnel already in the field and perhaps, even preservice student education.

We would further assert that early intervention requires a rather unique and demanding set of competencies. That is, it is both interdisciplinary in nature and carried out routinely in clinical and applied settings. Then, we would argue that training must take place across several interrelated domains: knowledge/understanding; interpersonal skills; clinical judgement; and, technical competence (see Figure 1). Clearly, some aspects of training will vary according to the discipline (e.g., physical therapy, special education, neurology, pediatrics); even so, the paradigm seems well-suited to promoting the generic and core professional skills. Making use of existing early intervention experts and regular early childhood faculty addresses the need for more qualified staff in both service delivery settings and higher education.

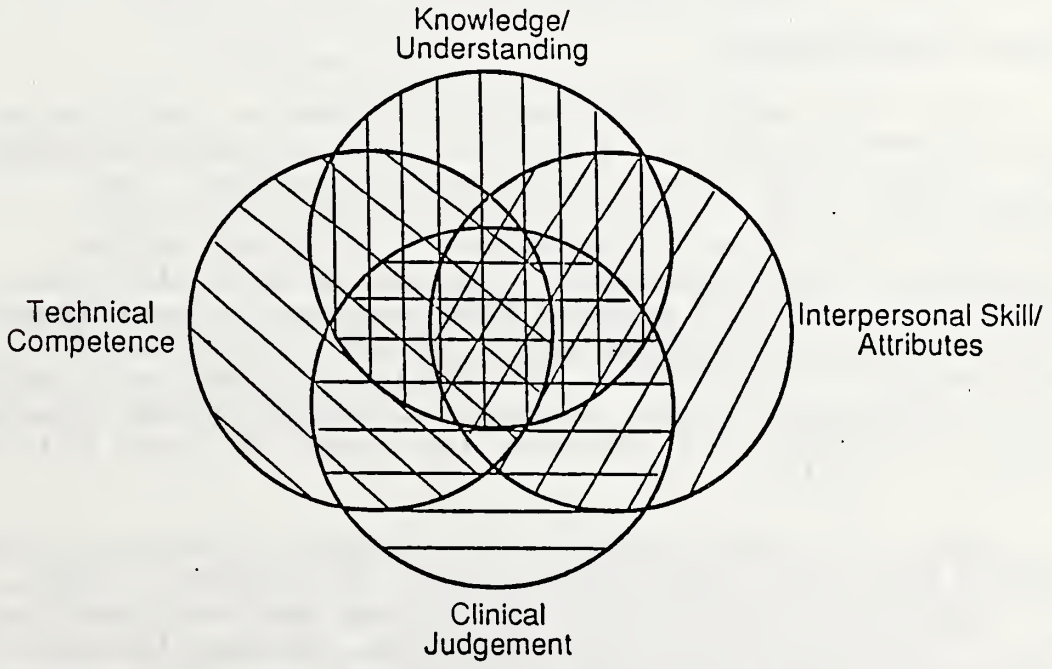

Figure 1: Major Domains for Transdisciplinary Training

Greater emphasis on most inclusive settings for young children's placements carries with it the opportunity to provide in-service for general educators in selected aspects of content related to children with disabilities. We would propose that all general early childhood courses integrate content related to early intervention. Concerted efforts to team general early childhood faculty with early childhood special education faculty constitute effective practice and reflect the team approach required in early intervention.

In efforts to provide in-service and preservice training to general educators as well as people in disciplines other than special education that are now required to work in the early intervention area and lack experience with this unique, diverse population (e.g., OTs, PTs, psychologists), it is useful to explore a career ladder concept of personnel preparation. The career ladder assures that trainees are recognized for academic preparation, experience and in-service training. An example of how this concept operates has been developed by Jeanne McCarthy (1988) at the University of Arizona (see Figure 2). As demonstrated in this figure, the same ladder can be applied to trainees across 11 disciplines. The first level includes paraprofessionals, including those at pre-high school completion level. Levels from I to VIII are represented on the left of Figure 2 and the types of positions appropriate to each level of training are listed on the right. Such a concept recognizes the diverse personnel preparation needs in this newly emerging specialty field.

Program Development

The third and final area of discussion pertains to program development, an area that contains some problems that overlap with those previously discussed. One predominant issue is the current emphasis on "full-inclusion" or "total integration." While we do not necessarily take exception, it needs to mesh with the continuum of service options regulated by federal teams charged with the responsibility of monitoring state departments of education. The mounting pressure to offer bipolar services (i.e., "either, or")poses a real challenge to the field and does not meet the needs of young children or their families.

Early childhood curriculum includes a wide variety of content areas and teaching-learning strategies. This includes the integration of technology applications in the early childhood curriculum. Although interest in what constitutes best practices in programs servicing young children who are at-risk or disabled is evident, guidelines describing the basic tenets of quality program development are lacking. McDonnell and Hardman (1988) have suggested six characteristics of exemplary programs, concluding that

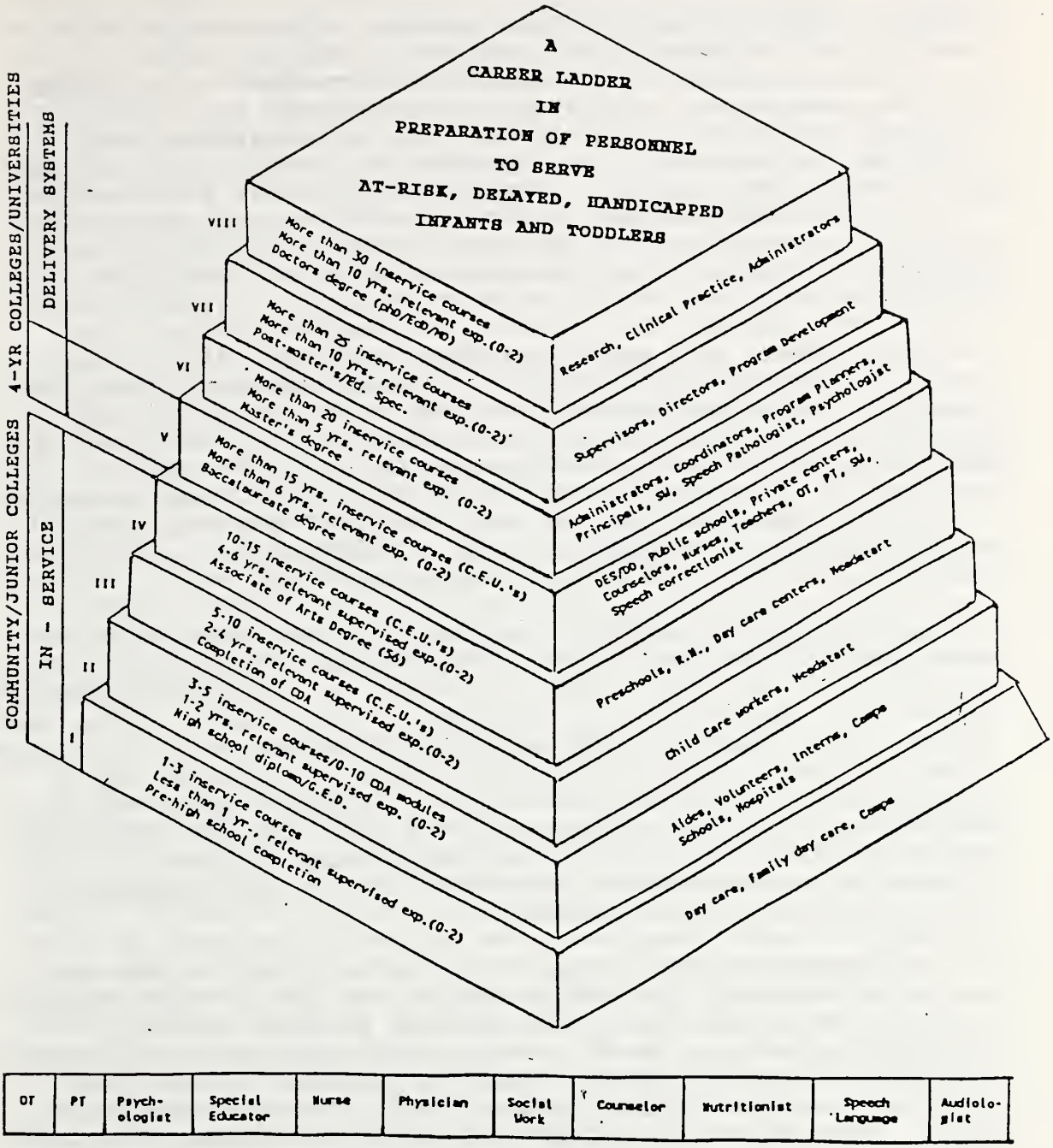

Figure 2: A Career Ladder in Preparation of Personnel

they are (a) integrated, (b) comprehensive, (c) normalized, (d) adaptable, (e) peer and family referenced, and (f) outcome based. They defined integration as grouping children with and without handicaps together for instructional or social activities. McDonnell and Hardman

(1988) further specified that service sites outside the family home be generic and systematic contact with nondisabled children be arranged. Comprehensive programs include assessment, planning, instructional programing, service coordination and evaluation; a trandisciplinary approach; theoretically and procedurally well defined model; and direct instruction. A normalized program is described as one that supports the parents' role, is age appropriate, promotes generalization, encourages self-initiation, and avoids artificial reinforcement or aversive techniques. Adaptable services are those that support a variety of family structures; are flexible and noncategorical; are individualized; and emphasize functionality of response as well as formative evaluations for programmatic changes. Peer and family-referenced services tend to (a) include parents as full partners; (b) consider family routines when enhancing child skill development; and (c) reference curriculum to individual child, family, peer, and community concerns. We still lack an empirically driven data base exploring best practices in early intervention and this has hampered program development and evaluation.

Obstacles to change. Implementing the continuum of services incorporated into the Reauthorization of the Education of All Handicapped Children Act (EHA) will require substantial creativity on the part of all local, state, and federal parties. Quality practice and research in this area exists in many places, including HCEEP and general early childhood organizations such as the National Association of Education of Young Children (NAEYC). It follows that some latitude is essential if we are to develop further innovative and exemplary programs that do not necessarily mirror past or current practices.

Alternative solutions. A large national survey was conducted recently (Hanson & Haring, in press) that queried randomly selected members of the CEC Division on Early Childhood (DEC) and NAEYC on what they considered to be best practices for the infant/toddler population versus the preschoolers with disabilities or who are at significant risk. Some strong findings that detail exemplary services for each age group and significant differences between what are critical aspects of program development for each emerged. Interestingly, the NAEYC members across all disciplines had significantly more years of experience working with children under six years old and in several instances actually rated items stressing integration as more important than did the DEC respondents. The major findings of this study are that a national consensus does exist concerning what are best practices in infant and early intervention. However, these findings need to be empirically proven through carefully controlled experimental studies. It is, therefore, suggested that a comprehensive, national, longitudinal, contextually rich research agenda be

established and consistently funded. This research agenda should encourage the collection of qualitative as well as quantitative data sets and set strict criteria for the quality of programs in which interventions are to be researched. A standardized evaluative instrument should be utilized across sites and researchers in order to insure program quality and the integrity of interventions studied. Further, the evaluative and degree of implementation studies (using the suggested standardized instrument) should be conducted by outside evaluators that are completely blind to the nature of the differences between interventions that are under study.

Until an empirically derived data base describing exemplary practices emerges to dictate program development, we can recommend that perhaps the most desirable solution is for the transdisciplinary team, working cooperatively with the family and case manager, be entrusted to orchestrate the delivery services within the range of necessary options. The qualities of that intervention -- its complexity, intensity, and duration, should be defined according to the nature of the individual situation, without administrative or fiscal constraints. We recognize that this may not be feasible, but argue that it represents a worthy goal as we strive to achieve quality services for young children with disabilities.

Strategies for Reaching the Ideal

Several years ago, a report by the Carnegie Forum on Education titled "A Nation Prepared: Teachers for the 21st Century", made a major impact on policy decisions in higher education. That report posited that the success of the reform movement hinges on the creation of professionals equal to the task, that is, well-educated teachers prepared to assume new roles and responsibilities to redesign schools of the future. We are in agreement with this assertion but would like to enlarge upon the range of professional disciplines to which it relates. From our perspective, it seems reasonable to extend that concept to embrace all disciplines presently involved in early intervention with young children with disabilities and their families.

Notwithstanding its intuitive appeal, we recognize that before people can assume new roles in our schools, homes, and in the community, universities must rethink the content of their personnel preparation programs. Professionals must examine the literature on current best practices and continue the dialogue. Widespread attention to the impact of technology on children with disabilities and their families must be addressed. While the sophisticated technology of the business world seems a far cry from early intervention programs and the pressures inherent in implementing P. L. 99-457, the reality is that children are

using various technology applications from infancy with great benefit. Yet without trained personnel, only a select few children will reap the benefits.

Thought must be given to specifying quality individual as well as team-initiated interventions. We are convinced that professionals can surrender a portion of their autonomy, without losing their identity, in order to merge more effectively with others to serve young children and their families. In this regard, workshops, symposia, practica, and course content at both preservice and in-service level seem to represent a part of the answer.

We have examined the current situation regarding early intervention, and have indicated that a compelling need exists for significant changes to occur. We specified a few of these changes. In closing on an expectant note, we would like to think that a well-conceived interdisciplinary effort can recapture the fervor that once surrounded the special education movement of the 1970s. Along with that singular, renewed dedication there must be an infusion of new knowledge and training skills along with a continuance of research and model program development activity that together contribute to better serving young children with disabilities and their families. In the final analysis, we believe that the solution to eliminating the barriers that have long separated professionals and their service recipients requires less a technical solution than a change in philosophy and attitudes. We can ill afford to maintain separate and dysfunctional pre- and in-service training programs if our goal is to establish the kind of service delivery systems required to comprehensively address the needs of young children with disabilities and their families.

References

Baily, D.B., Palsha, S. A., & Huntington, G.S. (1990). Preparing professionals to serve infants and toddlers with handicaps and their families: Current status and training needs. Journal of Early Intervention, 14(1), 43-54.

Bickel, D. (1991). Preventing school failure through preschool intervention: Issues for the 1990s. Preventing School Failure, 35, 29-35.

Bruder, M., & McLean, M. (1988). Preparation for infant interventionists: A review of federally funded projects. The Journal of the Division of Early Childhood, 12, 299-305.

Gallagher, J.J. (August, 1989). Policy Alert: Planning for Personnel Preparation (Public Law 99-457, Part H). University of North Carolina, Chapel Hill, NC, The Carolina Institute for Child and Family Policy.

Hanson, M.J. & Lovett, D.L.(1990). Final Report: California Early Intervention Personnel Model, Personnel Standards, and Personnel Preparation Plan. Sacramento, CA: Department of Developmental Services.

Hardin, G., Gallagher, J., & Lillie, T. (1989). State progress related to 14 components of PL 99-457, Part H. Chapel Hill, NC: Carolina Policy Studies Program.

Hendrickson, J.M., Gable, R.A., Hester, P., & Strain, P. (1985). Teaching social reciprocity: Social exchanges between young severely handicapped and nonhandicapped children. Pointer, 29, 17-21.

McCarthy, J.M. (1988). National clinical infant center. Washington, DC.

McDonnell A., & Hardman, M. (1988). A systhesis in "Best Practice" guidelines for early childhood services. Journal of the Division for Early Childhood, 12(4), 328-341.

Raver, S.A. (1991). Foundations of infant and toddler intervention. In S.A. Raver (Ed.). Strategies for teaching at-risk and handicapped infants and toddlers: A transdisciplinary approach. Columbus, OH: Merrill/MacMillan.

Riley, R.W. (1986). Can we reduce the risk of failure? Phi Delta Kappan, 68, 263-273.

Stahlman, J.I., Safford, P.L., Pisarchick, S.E., Miller, C.A., & Dyer, D.B. (1989). Crossing the boundaries of early childhood special education preparation. Teacher Education and Special Education, 12, 5-12.

White, K., & Casto, G. (1984). An integrative review of early intervention efficacy studies with at-risk children: Implications for the handicapped. Logan, UT: Utah State University, Early Intervention Research Institute.

PERSONNEL PREPARATION

Personnel Preparation: Some National Issues and Suggested Solutions

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Preparation of personnel in special education continues to be a concern at national and local levels. The Office of Special Education Programs noted in the Twelfth Annual Report to Congress (USDE, 1990) that nearly every state expressed needs in the areas of recruitment, training, and retention of staff. That report particularly noted the need for a greater supply of qualified personnel to alleviate overcrowded classes, to establish new programs, and for in-service training for teachers and paraprofessionals. Also noted was a short supply of qualified related services personnel. With knowledge of these and other personnel concerns, the personnel preparation sub-group of the innovative practices topic of the Forum on Emerging Trends in Special Education and Implications for Training Personnel discussed a wide range of issues and suggested solutions related to personnel preparation in special education.

Throughout the general discussions on personnel preparation, five major issues were identified with a number of concern areas subsumed under each. The issues are (a) reliable data needs; (b) training; (c) certification; (d) quality of personnel; and (e) economic issues. Each of these issues will be discussed with reference to defining the issues, alternative solutions, inhibitors to obtaining the ideal, and strategies for movement toward the ideal.

Defining the Issues

Data Issues

A variety of problems are associated with the need for more adequate and sophisticated data concerning the supply of and demand for special education personnel. Specific

needs identified were the need for the collection of accurate data; the need for more data describing training programs; the link between institutions of higher education (IHEs), the Comprehensive System of Personnel Development (CSPD), and the federal government; and the need for improved data reporting procedures across all levels and agencies. Similar data needs have been noted by other groups, such as the Clearinghouse on Teacher Education (1986), which noted that data on the supply and demand of teachers remain largely uncollected and scattered among local, state, federal, and private agencies.

Accurate and available data from a variety of sources is of particular concern to those who prepare professional special education personnel. Institutions of higher education utilize data from many sources on topics such as number of new teachers hired in school districts and agencies, state-wide teacher retirements, newly certified teachers, hiring in categorical areas of handicap, school age population estimates, and even population growth rates for given states and regions. These data are then used to justify maintenance or alteration of personnel preparation programs, to recruit prospective students, and to advise students concerning career choices within the field. However, without access to valid, reliable, comparable, and up-to-date data that can reflect supply and demand issues, justifications for training programs and initiatives are made more difficult.

Training Issues

Issues related to preparation of personnel to work with special populations abound. Some of the many issues raised for discussion included (a) how to prepare personnel to work with increasingly diverse populations; (b) the need for technology applications/integration into education and clinical practice; (c) transdisciplinary training; (d) continuing shortages in the preparation of related services personnel; (e) development and evaluation of new teaching methodologies; (f) recruitment of students into personnel preparation programs; (g) the status of teacher education and teacher educators in the IHE; and (h) faculty development and renewal.

From the wide range of issues identified above, it would be easy to view the issues as the problem. This should not be the case, however, since current issues, both old and new, can lead to new solutions and different approaches to personnel preparation. The issues as identified here appear to cluster around three topics: new areas and child/youth populations, student recruitment and shortages, and faculty needs. By the volume of issues identified, the new areas and populations grouping appeared to receive the most concern. Just how quickly and well can

personnel preparation programs respond to new areas of need, such as services for "cocaine babies", those with HIV/AIDS, and other children/youth who are at-risk? How can technology applications be interfaced with clinical practice and to what degree? How can transdisciplinary training be accomplished and in what configurations? What should be training programs' responses to the questions of categorical vs. non-categorical certification? These and many other questions center on diverse training issues which are not likely to disappear quickly.

Certification Issues

Certification issues currently dominate the state and national scene both for their impact on teacher supply and teacher training. Some of the issues relevant to certification concerns identified were (a) issues of definition; (b) types of certification processes, including alternative and temporary certification; (c) standards and quality concerns; (d) induction and mentoring procedures; and (e) curricular content covered prior to certification.

Discussion on the topic of certification took into consideration the status of both experienced and inexperienced classroom teachers. Questions arose such as (a) Should there be recertification or life long certification? (b) Should retraining cycles be considered, (c) Should certification be tied to role changes, and (d) Should there be a federal strategy to monitor certification processes and practices? Considerable discussion was directed toward the issue of whether or not there should be national professional standards for certification. Also, the issue of teacher education's role concerning participation with state education agencies (SEAs) and professional associations on certification processes provided the basis for further discussion.

Quality Issues

Concern related to the general concept of "quality" in personnel preparation programs is growing, particularly since there appears to be no national understanding of what constitutes "qualified personnel". In addition to issues of definition, a number of questions concerning quality were posed. What is "quality of instruction"? Is it the type of training program, or depth and breadth of training? What are effective teaching practices? To what extent has research applied to practice been conducted? Is there a dichotomy between pedagogy-based and research-based training programs? To what extend has quality control for preservice and in-service education been considered? How does instructional supervision support quality of preparation and instruction?

Quality issues are likely to become more and more a part of personnel preparation as programs evaluate themselves and their graduates and as non-education public officials attempt to make legislative decisions relevant to program efficiency and program support. Additional areas of concern related to quality issues were resources needed, levels of training, and teacher role changes. There need to be assurances that back-up resources will be available to support additional supervision, mentoring and monitoring processes. Do quality expectations change with different levels of training (e.g., bachelors and masters graduates, or from preservice to in-service status)? Who is responsible for determining quality, particularly if teachers' roles change?

Economic Issues

Fiscal concerns have become an increasing part of education and in many ways contribute heavily to the composition and quality of both training and service activities. Nationwide, economic issues are having negative impact upon IHEs, as evidenced by 29 states now engaging in deficit spending. California, New York, Pennsylvania, Florida, Michigan, and Virginia all face fiscal 1991 deficits of over one billion dollars (Harp, 1991). As a result, funding for higher education is endangered or has already been reduced. A case in point is Virginia IHEs that have received cuts averaging 16% by January, 1991, and face at least an additional 3% cut before June 30, 1991.

Some of the issues that emerge with reference to economic concerns are (a) funding and support for low incidence personnel preparation programs; (b) expense associated with acquiring and maintaining technology and augmentative systems in training programs; (c) development and maintenance of leadership training programs from preservice through doctoral levels; (d) loss of faculty positions through retirements and other attrition of college and university faculty; (e) loss of operating funds to support faculty travel and development; and (f) survival of special education service programs.

Concern was expressed relative to the decreasing support for general and special education. The state deficits also impact the fiscal support for special education services in each state (e.g., early childhood education requirements [ages 3-5] under P.L. 99-457). Where IHEs have often held a position vacant for a year to meet a temporary need, current deficits have resulted in permanent elimination of vacant faculty lines. How well will personnel preparation fare in the future, given the reductions in resources to IHEs in general?

Alternative Solutions

Although the negative conditions of the present may cause frustration, a proactive stance must be taken in seeking positive alternative solutions, both in the present and for the future. The discussion in this section will follow the sets of issues and problems identified in the preceding discussion.

With regard to the data issues previously discussed, there was agreement that unified training for CSPD coordinators nationwide should be provided with the training focused on processes and procedures for collecting and reporting accurate data. Such training would do much to enhance the present condition of state data collection. Ideally, more serious attention would be directed toward the collection of personnel data. There is positive expectation that new regulations in the Education of the Handicapped Act Amendments of 1990 will yield more substantive data on personnel that are employed, needed, and enrolled in preparatory programs. Another ideal solution would be for IHEs to become involved with state education agencies in acquiring and obtaining accurate state data on personnel trained, employed, and needed.

At the training level, several ideal solutions to present concerns were identified and are discussed below.

1. There should be the development of a common core curriculum in special education training programs that would support the development of other new and/or related areas.

2. There should be an involvement and infusion of transdisciplinary professionals into special education coursework and training. This could possibly lead to a combination of general and special education training curricula for a combined certificate.

3. The pros and cons of categorical and non-categorical training programs should be studied. It was suggested that non-categorical training programs be limited to programs that prepare personnel for students with disabilities.

4. A move toward more classroom- and practica-based training was endorsed. This coincides with other professional associations such as the American Speech, Hearing, Language Association moving in this direction (Butler, 1990).

The quality of instruction issue was considered with regard to alternative solutions. A major suggestion for improvement of quality in this area is encouragement of university faculty and classroom teachers to examine the efficacy of their own teaching processes. This could be accomplished through data-based measures collected in the classroom, practica, or clinical settings.

Similarly, the study group encouraged the identification of effective teaching practices, particularly those drawn from research in the areas of learning and instruction. The concept of "research into practice" or classroom applications of findings from formal research studies that focus on learning has considerable merit when related to quality of instruction. Issues surrounding the question of how to translate research into practice are continuously changing in the field of special education. With continued changes in policy and in the roles of special education teachers in the public schools, what skills must teachers learn in order to respond to and initiate effective school change? Similar questions are being addressed in the analysis of instruction in regular education (Guskey, 1988; Richardson, 1990). Concurrently, we are faced with decreased federal funding for research in special education (Fuchs & Fuchs, 1990) with progressively greater research needs as the profession begins to address new concerns in the field and the intent and implementation of new policies.

A final suggestion for improving the quality of instruction has to do with certification processes. A national study of the quality of the various types of certification programs is encouraged. There can be no assumption that all certification programs are equal or similar in quality until study, comparison, and validation studies have been undertaken. This is particularly true when the assurance of quality training and experience is balanced between different models of certification, such as traditional and alternative certification programs.

Efforts to provide some solutions to the current certification issues should include a broad-based identification and publication of state program approval guidelines. What is the national picture of base requirements for initial certification in given areas, such as early education of the handicapped? What coursework and experiences are required? National surveys to identify the content of training programs and the effects of certification standard reductions was recommended as an additional avenue for analyzing the quality issue.

As states attempt to resolve severe deficit problems, the higher education system is often singled out for a disproportionate share of fiscal reductions. Health, mental

health, welfare, and corrections are viewed as more protected areas, given life, health, and safety concerns. If an institution of higher education has reduced expenditures as much as possible, including layoffs of non-tenured faculty, a financial emergency can be declared. This action clears the way to allow for elimination of programs and tenured faculty in the program. Institutional researchers are called upon to identify programs with low enrollments, high clinical studies costs, or areas receiving a decreased number of applications for admission. Unfortunately, low incidence areas (e.g., vision, hearing, orthopedic impairments) tend to meet the criteria for elimination. A single faculty retirement or relocation may also result in elimination of a program.

While increasing taxes is an alternative, this is not an option for IHE personnel. Politicians and citizens generally resist tax increases, particularly during a recession. Tuition surcharges are a short-term strategy. For example, in 1990-91, tuition surcharges in Virginia IHEs prevented elimination of tenure track instructional positions while other university staff received layoff notices. As additional cuts loom ahead, surcharges will not be used again.

One option may exist with multi-state funding of selected IHE programs such as low incidence areas. Virginia and Maryland jointly initiated a regional college of veterinary medicine to meet a need not previously met by either state. Cooperation between two or more states could spread the costs of a low incidence program across a larger base while meeting the needs of the states.

Early retirement incentives utilized to reduce the number of high salaried faculty may be an option so long as individuals electing retirement are replaced. Of course, a qualified replacement must be available.

Inhibitors to Obtaining the Ideal

There are a number of inhibitors to the positive development of national personnel preparation activities. Several sets of inhibitors were identified and discussed. Obviously, the list of inhibitors that negatively impact personnel preparation could be quite lengthy. Due to the constraints of time available to discuss the issues and limited publication space, an abbreviated discussion is provided.

The absence of adequate and accurate data on special education teacher supply and demand, as well as projections of future personnel needs, is a major inhibitor to the planning and monitoring of special education personnel preparation activities. Inadequate data persists in areas

such as supply of new teacher education degrees conferred, number of teachers needed, employment of non-certified and emergency personnel, and teacher retirements and attrition (Haggstrom, Darling-Hammond, & Grissmer, 1988). Not only is much of the state and national data inadequate in volume and availability, special education personnel data reflect inaccuracies due to reporting errors, consolidated and estimated reporting of categorical and low incidence figures, and the purposeful withholding of data, such as in school district hiring practices. The lack of a strong state and federal reporting and monitoring process for collecting and reporting personnel data is recognized as a leading inhibitor.

Other inhibitors related to training issues were identified as being (a) limitations on IHEs in time and resources to prepare personnel with skills to intervene with the increasingly diverse special education population; (b) school district employers who desire to employ only personnel with numerous categorical certifications; (c) lack of local and national resources to support and expand training programs in low incidence areas and newly identified areas of need; (d) the continuing need for cross-disciplinary training and development of collaborative consultation skills; (e) the status of teacher educators in the professional community; and (f) continuing fiscal problems that affect the quality and breadth of personnel preparation. Although this list of inhibitors is diverse, there is a continuing need to seek proactive solutions to them on a wide front, including local, state and national levels.

Strategies for Movement Toward the Ideal

Related to the issues of data, training, quality, certification, and economics, strategies for forward movement are identified below.

For the <u>data issue</u>, some strategies suggested by the study group include:

1. A specific network for collecting needed personnel data at both state and national levels should be developed. Training program faculty must work cooperatively with university registrars to fill out correctly the Higher Education General Information Survey and other data collection instruments. Faculty should also provide accurate information to state CSPD coordinators and follow through to see that program data are reflected in ensuing reports. An example of a

system for assessing personnel needs using state and local data is the work of Lauritzen (1990) in Wisconsin.

2. Faculty should be invited to work with, and provide input to, SEAs on how to use Part D, Sec. 632, monies returned to the states from the Department of Education. Each state receives at least $75,000 for personnel development, and some of it could be used to help improve CSPD data collection and reporting procedures.

3. Professional organizations such as the Teacher Education Division of CEC should develop and become involved with systematic surveys related to personnel preparation issues and needs.

With regard to training issues, the following strategies were suggested:

1. Faculty in personnel preparation programs should work more closely with the Office of Special Education Programs staff on identifying issues and needs related to personnel preparation. Forums and study groups should be routinely scheduled to monitor and implement training activities in areas of need.

2. IHE faculty need to develop closer relationships within and among other disciplines and departments. This sharing could well result in the promotion of collaborative training, research, and development projects.

3. IHE faculty should work with SEA staff in defining best practices regarding degree programs and certification awards. Many states award rapid certification with little exposure of trainees to specific student characteristics or age differences. Input into SEA decision making regarding certification processes is most important.

4. IHE faculty should have greater input into state legislatures and legislative initiatives, particularly in the areas of program funding and certification processes.

Concerning the quality issue, the study group suggested the following strategies:

1. Personnel preparation programs should be evaluated for their efficacy. There needs to be an evaluation of models in use and newly implemented programs (e.g., consultant teacher programs, teacher collaborative models, and field based-programs vs. campus-based programs). It should be noted that P.L. 94-142 called for evaluation of both children and programs annually, but program evaluation generally has not occurred.

2. There needs to be a balance between pedagogy and research based training programs and theory-based and application based programs. Adherence to only one part of a dichotomy, such as those listed above, may not be sufficient to provide trainees well-rounded training program.

3. IHE faculty should view themselves (i.e., relative to their efforts to increase quality in preparation programs) as change agents who are instrumental in affecting planned educational change. The end product would be to develop and sustain innovative and effective practices in schools. A point of reference is the Rand Corporation change agent study of the 1970's and inferences made from it (McLaughlin, 1990).

4. State and national models for evaluating and monitoring quality of training and performance of graduates need to be developed. Effective approaches to instructional supervision, peer mentoring, and teacher induction programs should also be developed. Once developed and evaluated, effective programs need to be maintained according to conditions that Yin (1981) refers to as the "routinization of innovative practices".

Strategies suggested for the improvement of certification processes included the following:

1. IHEs in the individual states should examine SEA certification processes in order to determine those procedures that promote quality personnel preparation. Should adequate quality indicators be lacking, input by IHEs into changing existing standards should be sought.

2. There should be a nationwide study for determining the extent of reciprocity for special education certification among the states.

3. There needs to be the development of more standardized terminology/nomenclature regarding certification descriptions.

4. There should be investigation into the use of professional standards groups, such as the National Council for the Accreditation of Teacher Education (NCATE), to determine what competencies and experiences a national special education certificate should entail.

Strategies to meet economic challenges will depend upon the climate of the state and the IHE. They include:

1. tax increases, when needed;

2. state funded fellowships to prepare personnel in out-of-state IHEs when programs are eliminated; and

3. cooperative programs established and funded by two or more states.

References

Butler, K. (1990). The future of language science: Impact on clinical practice. ASHA Reports, 20, 51-60.

Clearinghouse on Teacher Education (1986). Data needs on teacher supply and demand. ERIC Digest #6. Washington, D.C.: American Association of Colleges for Teacher Education.

Fuchs, D. & Fuchs, L. S. (1990). Making educational research more important. Exceptional Children, 57, 102-107.

Guskey, T. R. (1988). Implementation of instructional innovation. Teaching and Teacher Education, 4, 63-69.

Haggstrom, G. W., Darling-Hammond, L., & Grissmer, D. W. (1988). Assessing teacher supply and demand. Santa Monica, CA: The Rand Corporation.

Harp, L. (1991). States face cuts, new taxes or both, 2 surveys find. Education Week, January 9, 18.

Lauritzen, P. (1990). A model system for the assessment of personnel needs in education. Unpublished manuscript. Whitewater, WI: University of Wisconsin-Whitewater.

McLaughlin, M. W. (1990). The Rand Change Agent study revisited: Macro perspectives and micro realities. Teaching practice. Educational Researcher, 19, 11-16.

Richardson, V. (1990). Significant and worthwhile change in teaching practice. Educational Researcher, 19, 10-18.

United States Department of Education (1990). Twelfth annual report to Congress on the implementation of P.L. 94-142. Washington, D.C.: Department of Education, Office of Special Education Programs.

Yin, R. K. (1981). Life histories of innovations: How new practices become routinized. Public Administration Review, Jan.-Feb., 21-28.

Collaborative Consultation: Perspectives from Special Education and Speech-Lanugage Pathology

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Among the topics addressed at the Forum on Critical Issues in Special Education, co-sponsored by the Office of Special Education and Rehabilitation and the University of North Texas, and reported in this monograph, was the utility of preparation of personnel in various models of collaborative consultation. It was acknowledged that there is a demonstrated need for more empirical studies on the effectiveness of such educational models when providing services to exceptional children in general education settings (e.g., Fuchs & Fuchs, 1990; Keogh, 1988; Lloyd, Crowley, Kohler, & Strain, 1988).

Defining the Issues

The collaborative consultation model has substantial support in psychology literature and an expanding research base within special education (e.g., Bergan, 1977; Gutkin, 1990; Jenkins, Pious, & Jewell, 1990; West & Cannon, 1988). While the concept of increased collaboration between teachers and speech-language pathologists has received increasing attention, there remains a lack of evidence supporting its effectiveness as a mechanism for serving school children with communicative disorders (Coufal, 1989/1990; Kamhi, 1990; Schulman, 1987; Secord & Wiig, 1990). This lack of evidence can be attributed, in part, to the relatively few communication disorders specialists trained and experienced in using the collaborative consultation approach (Adler, 1990).

The shift from a mechanistic to holistic paradigm in special education exemplifies the changing assumptions and methods by which education now approaches the child with special needs. Currently, regular and special educators are encouraged to form a partnership for the benefit of special needs children, enhancing mainstream options and avoiding disjointed services that segregate children (e.g., Hallahan, Kauffman, Lloyd, & McKinney, 1988). As Heshusius (1982, 1986) points out, the ongoing paradigm shift evident in special education has not been easy. It requires the relinquishing of accepted truths and casts doubt upon many long-held assumptions and convictions. Like special education, speech-language pathology has been struggling to

move from a mechanistic to a holistic paradigm in the assessment and treatment of communicative disorders (Schulman, 1987).

To move from the traditional behavioristic procedures to a holistic integrative approach requires a reconceptualization of at least three areas: (a) the nature of language learning, (b) the type of data necessary to demonstrate such learning is occurring, and (c) the manner by which the data should be obtained. Non-traditional data collection techniques, such as ethnographic interviewing and observation, curriculum-based assessment, and problem-solving approaches are emerging as the instruments of choice for those professionals seeking to address these three areas of concern (Gersten, Darch, Davis, & George, 1991).

To redefine the goals of assessment and intervention to include functional performance requires that speech-language pathologists investigate both the developmental processes in language and the role of communication in many contexts. Integrated service delivery promotes such investigations because it is interwoven within the natural environment. Additionally, integrated activities provide data which is relevant to the performance of a child within particular contexts, such as the classroom. Currently, special educators, including language specialists, are attempting to move away from an etiologically-based approach toward the evaluation of the interaction between the child and the environment.

Heshusius (1986) offers a defense for a paradigm shift in special education in her literature review on holism and behavioral educational technology. She points out that preoccupation with a search for causality and the adherence to behavioral objectives, for purposes of compliance with the legal mandates, has hindered holistic thinking. The IEP process, as it has been interpreted, has dictated the use of educational strategies that are mechanistic, focusing attention on the parts rather than the whole. These same issues have been addressed to the speech-language pathologist working in our schools (e.g., Secord & Wiig, 1990; Shulman, 1987; Norris & Damico, 1990). The need to move from the traditional isolated intervention model to an integrative approach leads to consideration of a consultative mode of services.

A model which has received recent support in educational settings is the collaborative consultation approach, derived from the triadic model of Tharp and Wetzell (1969) and Tharp (1975), and grounded in systems theory (Bertalanffy, 1968). As defined by Idol, Paolucci-Whitcomb, and Nevin (1986),

> Collaborative consultation is an interactive process that enables people with diverse expertise to generate creative solutions to mutually defined problems. The outcome is enhanced, altered, and produces solutions that are different from those that the individual team members would produce independently. The major outcome of collaborative consultation is to provide comprehensive and effective programs for students with special needs within the most appropriate context, ..." (p.1)

This model has been proposed as a viable educational approach which would be consistent with the legal mandates of P.L. 94-142 and its amendments, P.L.99-457, by maintaining children in the least restrictive environment (Fuchs, Fuchs, Bahr, Fernstrom, & Stecker, 1990; Kaufman, Agard, & Semel, 1985), facilitating family involvement for infants and toddlers (Blackman, 1988; McGonigel & Garland, 1988; Miller, Lynch, & Campbell, 1990; Szanton, 1988), and employment of prereferral intervention and mainstream assistance teams (Chalfant, Pysh, & Moultrie, 1979; Fuchs, Fuchs, Reeder, Gilman, Fernstrom, Bahr, & Moore, 1989).

For example, curriculum-based assessment and intervention requires use of a collaborative consultative approach to effectively bring special and regular education personnel together, on behalf of the child (Bigge, 1988; Nelson, 1989; Wesson, 1991). Similarly, language-based instruction, commonly referred to as the "whole language approach" (Goodman, 1986), encourages the speech-language pathologist and the classroom teacher to form a partnership on behalf of all children (King & Goodman, 1990; Norris & Damico, 1990). While the partnership has been advocated, there is little direction given for how to successfully form and maintain such teams. It is likely that the collaborative consultative model may provide the systematic processes necessary for bringing professionals together in a supportive relationship which actively involves all professionals in problem resolution. Finally, this model provides a blueprint for building a working relationship among professionals involved in educating children from diverse linguistic backgrounds (Creaghead & Tattershall, 1985; Moll, 1986; Nelson, 1984; Silliman, 1984; Westby, 1990), and for serving children at-risk for academic failure due to cultural differences between the home and school environments (Cooper & Speece, 1990; Maheady, Towne, Algozzine, Mercer, & Ysseldyke, 1983; Singer & Butler, 1987). The supposition is that the collaborative consultative model would serve to improve our educational system, if used effectively by well trained professionals. A critical assumption, however, is that such a cadre of well trained professionals exists or could be prepared to assume

the consultant role through use of short-term in-service training, such as the typical one or two day workshop.

Gersten and his colleagues compared the performances of teachers provided a standard 2-day in-service training to those provided an intensive in-service with apprenticeship in consultation They reported the following:

> The results of this study show that although an individual may be a skilled or experienced teacher, he or she will not automatically become a skilled consultant, advisor, and coach. The observations demonstrated that if teachers are not adequately trained in how to consult, they will tend to shy away from specific feedback and "escape" by providing broad, general feedback to teachers, or retreat into the never-ending world of paperwork. . . . The amount of technical knowledge, competence, and sensitivity in communication required by the position is immense. It is difficult to see how this can be accomplished without some type of serious apprenticeship and guidance (Gersten et al. 1991, p. 235).

Alternative Solutions: Implementation of the Collaborative Approach

While enthusiasm for use of the collaborative approach seems pervasive, there is need for substantial investment in preparing consultants. To be successful, it is necessary for consultants to understand the unique roles and responsibilities they will assume, as well as the steps to be followed in systematically employing this problem-solving process. Such preparation would be enhanced if it were to become a high priority at the federal and state levels within special and regular education.

Roles and Responsibilities of Participants

A brief discussion of some of the unique variables associated with the collaborative consultation model illustrates the type of information and understanding a consultant needs to successfully assume the role. Collaborative consultation does not mean that the special educator delivers special education instruction in the general education classroom (Idol, 1986). The consultation model essentially is indirect service to students (Idol; Lilly & Givens-Ogle, 1981). Huefner (1988) notes that while many of the responsibilities typically assumed by related service professionals fall within the realm of a consultant'srole, additional skills and knowledge were required for successful consultation. "Problem solving in

the regular classroom requires not so much the mastery of highly specialized techniques for hard-to-teach learners as mastery of questioning, listening, and strategizing skills" (Huefner, 1988, p. 405).

The model involves three individuals: (a) the target, (b) the mediator, and (c) the consultant. The target is the child for whom behavior change is sought. The mediator, also referred to as the consultee, is "the person with the available means of social influence for achieving the goal of ameliorating the target's problem behavior" (p. 1). The key identifying characteristic is that the mediator/ consultee has access to the child and influence over the child's behavior for a majority of the time in the setting in which services are to be delivered. The third participant, the consultant, is the individual with the skills and knowledge necessary to mobilize the influence of the mediator on behalf of the target. This may be another teacher, a special educator, psychologist, or speech-language pathologist, to name a few. Through mutual sharing of information, the consultant and mediator have reciprocal influence upon each other, contributing both content knowledge and process information to the problem solving process as they work together to ameliorate the problems of the target. In this process the mediator and consultant engage in mutual sharing for the purpose of problem solving. It is founded upon the premise of co-equal relationships, unlike the expert models of consultation. Both the consultant and mediator share equal responsibility for the problem analysis, program definition, and problem resolution.

Consultant Competencies

Using an interdisciplinary team of experts in the field of consultation from 47 states, West and Cannon (1988) identified competencies essential to the process of consultation. From a list of 71 competency statements, 47 essential competencies were identified in eight categories. Mean ratings of the individual competencies and the categories provided an index of the relative importance of each. West and Cannon reported the following categories were identified and prioritized as follows: (a) interactive communication, (b) equity issues and values/beliefs, (c) personal characteristics, (d) collaborative problem solving, (e) evaluation of consultation effectiveness, (f) articulating current status in consultation models and programs, (g) understanding concepts of organizational theory and systems analysis, and (h) demonstrating knowledge of basic applied research design and adaptations to consultation. The individual competencies receiving the highest ratings indicated an emphasis on interaction/ communication skills, problem-solving skills, personal characteristics, and assessing consultation outcomes.

Examination of the competencies judged to be essential for effective consultation provides an overview of the type of responsibilities assumed by the consultant in the collaborative relationship.

According to West and Cannon (1988), the competencies judged to be most essential in the categories noted above were as follows: establish and maintain rapport, demonstrate willingness to learn from others, facilitate consultation by modeling coping behaviors and flexibility, respect others opinions, communicate clearly, utilize active listening and responding (e.g., acknowledging, paraphrasing, reflecting, clarifying, elaborating), utilize effective interviewing to elicit information for problem exploration and goal setting, give and solicit immediate objective feedback, credit the ideas of others, manage conflict, generate alternatives through effective brainstorming, integrate ideas to formulate clear plans, and maintain availability for modeling and support. Few, if any, of these process skills are included in traditional preservice or in-service training for special education teachers or speech-language pathologists.

Principles of Collaborative Consultation

Four principles of collaborative consultation that underlie successful implementation of the concept include (a) team ownership of the identified problem, (b) recognition of individual differences in developmental progress, (c) application of reinforcement principles, and (d) consultation leading to data based decisions through functional behavior analysis.

Team ownership. Demonstration of mutual ownership of the problem and the problem resolution, through various means of interpersonal involvement between consultant and consultee, have been shown to have significant effects on the outcome of consultation. However, feedback alone is not the only means by which a consultant demonstrates commitment to problem resolution. As noted by Maitland, Fine, and Tracy (1985), consultant facilitativeness, empathy, congruence, and positive regard are characteristics necessary for building a relationship of shared regard.

Recognition of individual differences in progress. The second principle deals with individual differences in developmental progress, as referred to by Idol, Paolucci-Whitcomb, and Nevin (1986), related to participant changes in the participants. Thus, an important consideration is a consultees' perceptions of consultation interactions. As noted by Gutkin (1986), "a school psychologist's effectiveness as a consultant often is mediated as much or more by the subjective perceptions of a consultee as by objective reality" (p. 375). Gutkin assessed consultee

perceptions of the processes and outcomes of school-based consultation in 24 different schools over a six-year period. His analyses provided insight into factors which potentially contribute to a consultant's facilitation of a consultee's progress. First, consultant enthusiasm significantly affected consultee' satisfaction with a remedial program. Secondly, he concluded that a general orientation to the process during the entry (preconsultation) period is required. Gutkin's work also offers support for the pervasive attitude of teachers' preference for active involvement in the consultation process. Finally, there was no support for the notion of the-more-the-better. Effective consultation did not depend on the frequency of contacts but more critically on the consultees' perceptions of the consultants' attitude and commitment to the process.

Application of reinforcement principles results in improved skills, knowledge, and attitudes. Idol, Paolucci-Whitcomb, and Nevin (1986) described this principle as the application of contingency management and reinforcement theory in managing the behavior of the target as well as for application to the consultation relationship. That is, by enhancing a consultee's understanding and practice of reinforcement principles in the process of ameliorating a child's problems, the likelihood is great that similar practices will be evident in the interactions between the consultant and consultee. They noted that such practices build consultees' confidence that they can effect changes in the performance of students. Enhancing the teacher's sense of efficacy has a reciprocal effect upon their expectations for student performance and consequently upon student achievement. This principle calls for knowledge of the underlying learning theories, and understanding of the effects of particular communicative/interactive strategies.

For example, Tombari and Bergan (1978) found that verbal cues provided by the consultant directly affected teachers' attitudes about children and the likelihood of resolving classroom problems. When consultants employed cues typical of the medical model, suggesting internal causes for problems idiosyncratic to the individual client, the teachers' responding verbalizations were not only congruent with the focus upon etiology/causes attributed to the child, but also expressed pessimism about the potential for change. Behavioral cues provided by the interviewer, however, resulted in teacher verbalizations which expressed greater optimism for problem resolution and the type of problem definition provided by the interviewee. Thus, theoretical orientations have a differential affect on teacher verbalizations, expectations and problem definitions. Underscored by this investigation was the observation that the consultant's theoretical bias not only influences his or her verbalizations, but those of the consultee as well.

Further support was offered by Witt, Moe, Gutkin, and Andrews (1984), who investigated the effect of jargon upon teachers' evaluation of the acceptability of an intervention approach. The way an intervention was described and the rationale provided teachers was found to influence teachers' acceptance of the prescribed intervention as a viable method for implementation. Three types of jargon were evaluated: (a) behavioral, (b) pragmatic, and (c) humanistic. These three types of jargon typically were used in describing classroom problems, and were found to have a significant impact upon teacher acceptance and application of interventions. It was concluded "that the language used to describe an intervention has a marked impact on teachers' perceptions of its acceptability" (p.365). Specifically, pragmatic descriptions were found to be more acceptable than either of the other two. Thus, while Idol, Paolucci-Whitcomb, and Nevin (1986) emphasized application of reinforcement principles for improving skills, knowledge, and attitudes, it is important to consider the impact of strict behavioral cues upon consultee responses. Reinforcement principles should be considered in the broadest regard, with caution for use of language implying strict Skinnerian approaches to behavior management.

The interdependence of the principles discussed by Idol, Paolucci-Whitcomb, and Nevin (1986) become apparent as they are related to of the collaborative model and nature of the communications used in the process. To build an orientation of parity that recognizes the idiosyncracies of the participants and seeks to build effective skills through enhanced knowledge and positive attitudes requires congruence between the role of the consultant and the goal of the consultant-consultee relationship: to foster independence, expertise, and autonomy. Unlike unidirectional models in which consultants define themselves as an expert and a consultee as a dependent, the collaborative model is more congruent with the goals of the process (Tyler, Pargament, & Gatz, 1983). Thus, not only are the first three principles interdefined, but the fourth principle relates to the consultation context.

Consultation: data-based decisions through functional behavior analysis. The fourth principle relates to the nature of assessment, the type of data utilized, how data is employed, the manner by which data is gathered, and the process of ongoing data collection. Integrated models of service delivery necessitate a change from reliance upon formal, standardized assessments to a more functional, dynamic approach to analyzing communicative behaviors (Broen, 1988; Dale & Cole, 1988; Damico & Oller, 1980; Nelson, 1986; Silliman & Lamanna, 1986).

Idol, Paolucci-Whitcomb, and Nevin (1986) emphasized the need to analyze those factors contributing to the

maintenance, increase, or decrease of the specified behavior. Behavior is viewed as a function of the interaction between the individual and the environment, and therefore is context dependent. As Idol-Maestas (1983) and Meyers, Parson, and Martin (1979) pointed out, the process of identifying a problem initially and measuring performance change over time contributes to a consultees' understanding of the consultation process and building of the consultant-consultee relationship.

It should be noted that the collaborative consultation model does not prohibit direct assessment or intervention with the child. In fact, there is evidence that for some children a combined approach may be more effective (Schulte, Osborne, & McKinney, 1990). What is apparent, however, is that ecological assessment, through observation and interview, is pivotal to collaboration.

Steps in the Consultation Process

The stages of collaborative consultation most generally agreed upon included (a) general orientation, (b) problem definition and formulation, (c) generation of alternatives, (d) decision making, and (e) verification.

General orientation. General orientation refers to an individual's attitude toward the situation. Three characteristics of a successful orientation toward problem solving include acceptance of problems as a normal part of life, recognition of problems as they arise, and responsiveness to problem situations rather than ignoring the situation or acting upon impulse (D'Zurilla & Goldfried, 1971). The first step in the process is to create an attitude of coping and optimistic expectations that the problem can be resolved.

Problem definition. Second, problem definition and formulation, refers to the process of clearly defining all aspects of the problem in operational terms, and clarifying the relevant details, issues, and subproblems within the situation.

Generation of alternatives. This stage is referred to as brainstorming because it focuses upon generating possible solutions for a problem. The goal is to generate appropriate solutions in a way that provide maximum probability for the most effective solution being among the alternatives (D'Zurilla & Goldfried, 1971). As Heppner (1978) stated, that may appear to be a simple task but any one or a combination of factors could interfere with the process. Increasing the number of alternatives generated is promoted by application of Osborn's (1963) four rule brainstorming technique: (a) withholding judgements, (b) free-wheeling welcomed, (c) quantity desired, and (d) combining and

improving suggestions (Heppner, 1978; D'Zurilla & Goldfried, 1971). The collaborative consultation model requires that the consultant share in the process equally with the consultee, modeling the behaviors desired of the consultee, providing instructions, and contributing content to the brainstorming process.

Decision making. The goal of the fourth stage is defined as selecting one strategy or action from a number of alternatives. Of primary importance is emphasis upon identifying accurately the best alternative from the possible alternatives generated. As Cormier and Cormier (1979) noted, the consultant's role is to model decision-making behavior as well as to guide the consultee through the process by overtly instructing them in the steps of decision making.

Verification. The final step, verification, takes place after the chosen outcome has been carried out. Verification allows for determining the actual consequences, reassessing the presenting situation, and making modifications, as needed. This, of course, requires ongoing observation and interviews between consultant and consultee. The critical role of accurate data documenting the actions of a consultee in the context of the situation, the actions of a target child in response to a consultee, the influences of other variables upon the actions of consultee and child, and the evaluation of a consultee's subjective and objective assessments of presenting situations can thus be related to the chosen strategy and predicted outcome.

Inhibitors to Collaborative Consultation Implementation

Consideration of the roles, responsibilities, and competencies of consultants, the principles of consultation, and the stages to effective use of collaborative problem solving makes evident the need for training of prospective consultants. It is not sufficient to be well-intentioned, but rather, special services personnel must be well-trained and equipped with knowledge specifically related to the content areas specific to their discipline and the process of employing a collaborative problem solving model. Such information and skills can only be developed through training. As we look toward future trends, it is apparent that the collaborative problem solving approach will continue to gain enthusiastic support if it is successful. However, like any trend, if it meets failure it will be abandoned. Justifiable abandonment of this approach, based upon data documenting its ineffectiveness, is warranted. Regrettably, history demonstrates that educational reform has been the victim of practitioners' lack of understanding and training in the necessary theoretical foundations and critical competencies vital to systematic implementation and evaluation of the targeted pedagogical practice (Cuban,

1990; Kaufman, Kameenui, Birman, Danielson, 1990). What is needed at this time is intensive, systematic training of professionals who will be expected to serve as consultants in varied educational contexts, including special education and related services personnel.

Strategies for Implementing Collaborative Consultation in the Area of Communication Disorders

Speech-language pathology has begun to develop systems models of intervention for children with communicative disorders. The shift from a "catch-up model", typically associated with pull-out programs focusing upon tutorial approaches to intervention has been documented (Launer & Lahey, 1981; Nelson, 1986). Recent enthusiasm and evidence has been provided in support of strategy-based models (Lasky, 1985; Tattershall, 1987; Wallach & Miller, 1988; Wiig & Semel, 1984). These models emphasize <u>how</u> children learn rather than <u>what</u> is learned, and are based on the premise that children can learn strategies for problem solving which are generalizable across content and tasks.

Many of the strategy-based interventions reportedly were grounded in Feuerstein's mediated learning theories and his Instrumental Enrichment Program (1979). The underlying concept of his model was that children could learn to internalize and selectively apply strategies for the purpose of problem solving. Such intervention techniques hold promise for interventionists working with children with communicative disorders (Catts & Kamhi, 1987; Schwartz & McKinley, 1984; Wallach & Miller, 1988). Systems models, however, have not been empirically examined within the field of communication disorders, although they have been elaborated upon as potentially powerful models and support has been inferred from related investigations.

Fujiki and Brinton (1984) posited that a speech-language pathologist would benefit children and teachers by providing suggestions regarding how a teacher might use classroom communication to compliment the treatment program for a child. The authors implied using a collaborative approach with teachers in the following statement:

> The speech-language pathologist is likely to be most successful if the teacher is approached as a fellow professional, rather than as someone in need of an expert's advice. It must be remembered that the school speech-language pathologist and the classroom teacher are colleagues on the public school educational team. For any team approach to be effective, team members must combine their individual talents to work toward a common goal. In this case the goal is providing the best possible education for the language-handicapped

> child. Considerable progress may be made toward this goal if the speech-language pathologist and the classroom teacher are able to provide each other with information and support. (pp. 98-99)

Based upon what was known about effective adult-child interaction, Fujiki and Brinton provided a number of suggestions for working with classroom teachers.

Conceptual discussions encouraging a systems approach have been presented by Damico (1987), Marvin, (1987), McKinley and Lord-Larson (1985), Nelson (1986, 1989), and Simon (1981, 1987). Yet, few empirical investigations directly related to the notion of combining collaborative consultation and treatment of communicative disorders have been reported. Coufal (1989/1990) reported collaborative consultation was effective in modifying teachers' instructional discourse patterns as well as the discourse of children with communicative disorders. She also found that training in the critical competencies of collaborative problem solving with regular education teachers was very effective. Teachers' knowledge and attitudes regarding consultation were significantly increased, as measured by the Needs Assessment Instrument (West & Cannon, 1988) in eight consultation competence categories.

Coufal's outcome data were interpreted to mean that all participants increased their knowledge of collaborative consultation and the problem-solving process as a result of their involvement in the study. She concluded that the involvement of teachers and a speech-language pathologist in collaborative consultation has a functional relation to the knowledge, attitudes, and behaviors of teachers. While the generalizability of these findings must be viewed with caution, due to a limited number of subjects, this investigation represents a first-step in the process of validating a collaborative model as an effective means of service delivery to children with communication disorders. Future research is needed to determine the effectiveness of the model as a means of training additional personnel within speech-language pathology and with teachers and others from related disciplines.

Consultant Competencies for Speech-Language Pathologists

Emphasis has been placed upon training consultants in particular process skills to insure successful fulfillment of their role, but there is no available information regarding the most effective manner for providing such training. Knowledge of the theory, process, and skills of consultation typically are not included in preservice programs for speech-language pathologists. Presumably sufficient content information is disseminated to prepare

them for service delivery to a variety of communicatively disordered targets, but teaching how to impart information to mediators has not been a focus of most graduate education programs. Further, analysis of classroom dynamics, curricula, and adult-child interactions are not uniformly included in preservice programs of study for speech-language pathologists. Investigations of competencies needed for assuming the role of consulting speech-language pathologist will be needed to guide in the preparation of future speech-language pathologists.

Future Trends in Research

To insure quality research in special education and the related professions an agenda for further investigation of the efficacy of collaborative consultation must include personnel preparation. Such research must be theoretically based rather than a reflection of the current trends (Fuchs & Fuchs, 1990; Fuchs, Fuchs, Bahr, Kaufman, Kameenui, Birman, & Danielson, 1990). This requires training of consultants for participation in the theory and application of interpersonally-based problem solving consultation to insure the fidelity of the treatment. Thus, a priority for funding should be the inclusion of a training component for participants serving as consultants.

In addition, the efficacy of various training approaches must be determined if research is to be applicable to our schools and future pedagogical policies and practices. As Keogh (1990) points out in her discussion of the gap between educational policy and practice, policy change historically has not been based upon empirical findings but rather on social-political concerns. Keogh applauds the efforts of the Division of Innovation and Development of the federal Office of Special Education and Rehabilitative Services (OSERS) in its mandate for applied research which would systematically study the efficacy of educational models designed to 'reform' existing policies and practices on behalf of the nation's children. However, she notes that there are pragmatic and financial constraints to such research which have resulted in reduced applicability to the "real world" of schools. One concern expressed is the need for consistency between theory and practice. To enable practitioners successful application of empirical findings will require (a) training in the theoretical foundations of collaborative problem-solving, and (b) extrapolation from empirical data which transforms the findings into meaningful, recognizable pedagogical practice.

First, the need for training is based upon the nature of the collaborative problem-solving approach, in which the roles, principles, and stages of the model derive from systems theory. Second, applied theoretical designs must

closely approximate the "real world" of practitioners in order to assure transference to the classroom. That is not to suggest that "basic" research, employing experimental-control conditions, has no place in the research agenda. However, it is imperative that findings be presented in a manner which is interpretable and available to practitioners. As Kaufman and his colleagues (1990) point out, the raw data may have no resemblance to the final, marketable product, because in its raw form it has little value to those shopping in the marketplace. Thus, ongoing training of policy makers and practitioners is a necessary component of the research, to ensure that educational reform is a continuing journey, which does not end with the completion of an investigation and subsequent publication of findings. Meaningful research will investigate not only the outcomes of a collaborative problem-solving approach, but also the differential effects of varied approaches in the training of such consultants. It is critical that investigators determine how to best prepare consultants to work in our schools, as well as to prepare leadership personnel to carry on future research as researchers and practitioners move beyond the initial stages of collaborative consultation implementation. It is in this way that applied research will provide schools with professionals who have developed unique skills as a byproduct of their participation in the research.

Because the collaborative consultation model is dependent upon trusting relationships built upon mutual sharing and parity, administrative understanding and support of the approach are equally imperative. To expect successful employment of the model in the absence of thorough administrative understanding is to ensure failure. As Montgomery (1990) noted, the most successful programs in schools are those with both "top-down" and "bottom-up" support. Thus, research in this area will necessitate training for administrators as well as staff. There is the risk that administration will see the consultative approach as a means of 'piling kids deeper to educate them cheaper'. While efficacy is necessarily tied to fiscal responsibility, quality educational practices should not be defined from a perspective of 'the cheaper the better'. To ensure successful implementation, administrators need training that will enable them to serve as the educational leader in their buildings in the theory and process of the collaborative approach.

Funding the Research Enterprise

There is a need for OSERS and its Personnel Preparation programs and Innovation and Research program to consider increased support for longitudinal (as well as short-term) research. As has been implied throughout this paper, collaborative consultation in and of itself is best carried

out over time and that outcomes are enhanced by team building and careful modeling of skills and strategies.

As has been noted by Fuchs and Fuchs (1990), an occasional study in the real world of the classroom is insufficient to address the pervasive and multiple problems encountered in our schools. A concerted effort to support quality school-based research is required to produce the data upon which appropriate changes may be made in serving children with special needs. To realize the objectives of the research agenda requires consideration of (a) the need for substantial increases in funds to support research longitudinally as well as for start-up projects, (b) the need for critical mass research, and (c) emphasis upon supporting research projects which are meaningful, applied-theoretical investigations that demonstrate how they will produce and communicate useable outcomes to the educational community.

Presently, there is enthusiastic support for the employment of collaborative consultation in treating children with communicative disorders (Coufal, 1989/1990; Schulman, 1987; Secord & Wiig, 1990). Because this population represents a large portion of the special education numbers, it is imperative that we determine the most efficient and effective means for providing services. Further, there should be recognition that all teaching involves careful management of the instructional discourse to enable learning and to accommodate individual differences in the classroom (Butler, 1984; Nelson, 1984, 1985; Silliman, 1984, 1987). The importance of attention to individual differences was highlighted by Silliman (1984) in her discussion of the function of instructional discourse:

> In contrast to the social saliency of everyday discourse, instructional discourse has a primary cognitive function in the transmission of scientific or logically based knowledge. In other words, instructional discourse is intended to structure the transformation from thinking about knowledge to thinking in terms of knowledge as an objective and reflective mental activity. (p. 289)

As we know, all children entering school do not have the same cultural and social experiences, or language readiness for meeting the conceptual demands of school (Cazden, 1979, Cook-Gumperz, 1977; Damico & Nye, 1990; Nelson, 1984; Simon, 1985; Tough, 1977). The greater the distance between the home and school, the greater the potential for failure. Yet, teachers' conversational styles reflect an underlying assumption of class homogeneity, as reflected by the lack of variation within or between classes

(Silliman, 1984). Teachers apply similar strategies to accomplish the goal of mediating learning, which was defined by Silliman as follows:

> These adult conversational strategies are designed principally as the interactional framework for mediating intellectual activity, or getting the child to know. More strictly, teachers' conversational strategies are supposed to function as an externalized cognitive model through which children are provided with implicit principles for learning how to mediate, or self-regulate, problem-solving activity using verbal processes. It is unclear, however, whether these conversational strategies actually do result in the acquisition of new cognitive scripts for planful behavior. (p. 292)

There is little empirical evidence to suggest that teachers modify their "interactional framework for mediating intellectual activity" despite the evidence that children have individual learning styles. In fact, Moll (1986) and Calculator (1985) suggested that a form of instructional bias was evidenced by teaching to the lowest language levels. That is, reducing the instructional level to what is assumed the lowest language levels of the children.

Berlin, Blank, and Rose (1980) underscored the importance of language in the schools as the medium through which all learning takes place. Silliman (1984) pointed out that not all talk is effective teaching, though most teaching involves talk. Nelson (1984) encouraged determination of those aspects of teacher discourse contributing to effective teaching, but noted that the research in the area of school discourse was sparse. She reported that literature in this area described teaching as a process of deciding which discourse styles and content to use; what pace to set; and how to best manage a classroom, not in a sense of discipline but as part of the larger process of selection of a discourse style. Nelson placed responsibility upon a teacher for determining the most effective strategies for the mediation of learning, noting that while classrooms have been characterized as teacher-talk dominant and child-listening paradigms, it was the responsibility of teachers to be sensitive to the feedback of children as conversational partners.

Because the collaborative consultative approach is designed to address problems within the context of the classroom, teacher behavior is a target for evaluation and change. It has been demonstrated that teacher discourse can be changed in specific ways that not only address the needs of children with communicative disorders but also facilitate

communicative development for all children in the classroom while accommodating individual differences (Coufal, 1989/1990). Thus, the model has potential for serving as a preventative as well as an intervention approach. This is a vitally important consideration as we examine the needs of our schools in their attempt to maintain children in the mainstream setting, despite their differences in learning style and cultural, ethnic, and experiential backgrounds.

To adequately produce a mass of applied investigations will require training of large numbers of professionals as consultants to participate in the investigations. As a group, consultants trained as speech-language pathologists may affect greater numbers of children because they would be addressing modifications in the discourse of classroom teachers; thereby serving as agents of prevention as well as intervention through their role as catalytic change agents. By placing personnel preparation as a top priority, not only will the cadre of professional consultants be increased, but schools will benefit by the enhanced skills of their faculty, and research will document the most effective training approach.

The third priority, the need for meaningful, applied-theoretical investigations in the area of collaborative consultation, is interdependently related to the first two. It is not sufficient to note that a 'model' project or personnel preparation grant was successful, in a brief article published in a professional journal. What must be made clear is that federally funded support be awarded to those applications that include components that will effectively communicate the outcomes to the educational marketplace. This should include such products as training materials, course development within university settings to prepare future professionals, continuing education offerings, and replication studies. A special issue of Exceptional Children (Zigmond, 1990) documents that it is possible to conduct quality, meaningful school-based research, within the guidelines of federal Research and Development priorities. Further, that issue addresses the need for making outcomes available and useful to consumers of education research. By continued support for projects training consultants, there is a natural process through which to disseminate new information that is immediately meaningful to the consumer. The dual approach of funding research in collaborative consultation while at the same time suggesting to institutions of higher education that they proceed with personnel preparation which includes a focus on collaborative consultation, should enhance the outcomes from the federal investment of financial support. Collaboration between and among special educators and related service personnel enhances the likelihood that they will interweave their efforts to effectively serve children with special needs.

References

Adler, S. (1990). Multicultural clients: Implications for the SLP. Language, Speech, and Hearing Services in Schools, 21 (3), 135-139.

Bergan, J. R. (1977). Behavioral consultation. Columbus, OH: Merrill.

Berlin, L. J., Blank, M., & Rose, S. A. (1980). The language of instruction: The hidden complexities. Topics in Language Disorders, 1, 47-58.

Bertalanffy, L. von (1968). General systems theory: A critical review. In W. Buckley, (Ed.). Modern systems research for the behavioral scientist (pp. 11-30). Chicago: Aldine. (Reprinted from General Systems, 1962, 7, 1-20).

Bigge, J. (1988). Curriculum based instruction for special education students. Mountain View: CA: Mayfield.

Blackman, J. A. (1988). From the editor. Infants and Young Children, 1(1), v.

Broen, P. A. (1988). Plotting a course: The ongoing assessment of language. In R. L. Schiefelbusch, & L. L. Lloyd (Eds.), Language perspectives (pp. 299-320). Baltimore: University Park Press.

Butler, K. G. (1984). The language of the schools. ASHA, 26(5), 31-35.

Calculator, S. N. (1985). Describing and treating discourse problems in mentally retarded children. In D. N. Ripich & F. M. Spinelli (Eds.), School discourse problems (pp. 125-148). San Diego: College-Hill.

Catts, H. W., & Kamhi, A. G. (1987). Intervention for reading disabilities. Journal of Childhood Communication Disorders, 11, 67-80.

Cazden, C. B. (1979). Peekaboo as an instructional model: discourse development at home and at school. Child Language Development, 17, 1-29.

Chalfant, J., Pysh, M., & Moultrie, R. (1979). Teacher assistance teams: A model for within-building problem solving. Learning Disability Quarterly, 2, 85-96.

Cook-Gumperz, J. (1977). Situated instructions: Language socialization of school age children. In S. Ervin-Tripp &

C. Mitchell-Kernan (Eds.), Child Discourse (pp.103-124). New York: Academic Press.

Cooper, D. H., & Speece, D. L. (1990). Maintaining at-risk children in regular education settings: Initial effects of individual differences and classroom environments. Exceptional Children, 57(2), 117-126.

Cormier, W. H., & Cormier, L. S. (Eds.). (1979). Interviewing strategies for helpers. Fundamental skills and cognitive behavioral interventions (2nd ed.). Monterey, CA: Brooks/Cole.

Coufal, K. L. (1990). Collaborative Consultation: An alternative to traditional treatment for children with communicative disorders. (Doctoral dissertation, University of Nebraska-Lincoln, 1989). Dissertation Abstracts International, 51/02, 694A.

Creaghead, N., & Tattershall, S. (1985). Observation and assessment of classroom pragmatic skills. In C. Simon (Ed.), Communication skills and classroom success: Assessment of language-learning disabled students (pp. 105-131). San Diego: College-Hill.

Cuban, L. (1990). Reforming again, again, and again. Educational Researcher, 19(1), 3-13.

Dale, P. S., & Cole, K. S. (1988). Comparison of academic and cognitive programs for young handicapped children. Exceptional Children, 54, 439-447.

Damico, J. S. (1987). Addressing language concerns in the schools: The SLP as consultant. Journal of Childhood Communication Disorders, 11, 17-40.

Damico, J. S., & Nye, C. (1990). Collaborative issues in multicultural populations. Best Practices in School Speech-Language Pathology, 1, 127-140.

Damico, J. S., & Oller, J. W., Jr. (1980). Pragmatic versus morphological/syntactic criteria for language referrals. Language, Speech, and Hearing services in Schools, 11, 85-94.

D'Zurilla, T. J., & Goldfried, M. R. (1971). Problem solving and behavior modification. Journal of Abnormal Psychology, 18, 107-126.

Feuerstein, R. (1979). The dynamic assessment of retarded performers: The learning potential assessment device, theory, instruments, and techniques. Baltimore: University Park Press.

Fuchs, D., & Fuchs, L. S. (1990). Making educational research more important. Exceptional Children, 57(2), 102-107.

Fuchs, D., Fuchs, L. S., Bahr, M. W., Fernstrom, P., & Stecker, P. M. (1990). Prereferral intervention: A prescriptive approach. Exceptional Children, 56(6), 493-513.

Fuchs, D., Fuchs, L. S., Reeder, P., Gilman, S., Fernstrom, P., Bahr, M. W., & Moore, P. (1989). Mainstream assistance teams: A handbook on prereferral intervention. Nashville, TN: Peabody College of Vanderbilt University

Fujiki, M., & Brinton, B. (1984). Supplementing language therapy: Working with the classroom teacher. Language, Speech, and Hearing Services in Schools, 15, 97-109.

Gersten, R., Darch, C., Davis, G., & George, N. (1991). Apprenticeship and inservice training of consulting teachers: A naturalistic study. Exceptional Children, 57(3), 226-236.

Goodman, K. S. (1986). What's whole in whole language? Portsmouth, NH: Heinemann.

Gutkin, T. B. (1986). Consultees' perceptions of variables relating to the outcomes of school-based consultation interactions. School Psychology Review, 15, 375-382.

Gutkin, T. B. (1990). Consultative speech-language services in the schools: A view through the looking glass of school psychology. Best Practices in Speech-Language Pathology, 1, 57-66.

Hallahan, D. P., Kauffman, J. M., Lloyd, J. W., & McKinney, J. D. (Eds.). (1988). Journal of Learning Disabilities, 21(1).

Heppner, P. P. (1978). A review of the problem-solving literature and its relationship to the counseling process. Journal of Counseling Psychology, 25, 366-375.

Heshusius, L. (1982). At the heart of the advocacy dilemma: A mechanistic world view. Exceptional Children, 49, 6-13.

Heshusius, L. (1986). Paradigm shifts and special education: A response to Ulman and Rosenberg. Exceptional Children, 52, 461-465.

Huefner, D. S. (1988). The consulting teacher model: Risks and opportunities. Exceptional Children, 54, 403-414.

Idol, L. (1986). Collaborative school consultation (Report of the National Task Force on School Consultation). Reston, VA: Council for Exceptional Children.

Idol, L., Paolucci-Whitcomb, P., & Nevin, A. (1986). Collaborative consultation. Rockville, MD: Aspen.

Idol-Maestas, L. (1983). Special educator's consultation handbook. Rockville, MD: Aspen.

Jenkins, J. R., Pious, C. G., & Jewell, M. (1990). Special education and the regular education initiative: Basic assumptions. Exceptional Children, 56(6), 479-491.

Kamhi, A. G. (1990). Clinical forum: Whole language. Language, Speech, and Hearing Services in Schools, 21 (4), 205-249.

Kaufman, J. M., Agard, J. A., Semmel, M. I., & Morra, L. G. (1985). Overview. In J., M. Kaufman, J. A. Agard, & M. I. Semmel (Eds.), Mainstreaming: Learners and their environment (pp. 3-20). Cambridge, MA: Brookline.

Kaufman, M. J., Kameenui, E. J., Birman, B., & Danielson, L. (1990). Exceptional Children, 57(2), 109-115.

Keogh, B. K. (1988). Improving services for problem learners: Rethinking and restructuring. Journal of Learning Disabilities, 21(1), 19-22.

Keogh, B. K. (1990). Narrowing the gap between policy and practice. Exceptional Children, 57(2), 186-173.

King, D. F., & Goodman, K. S. (1990). Whole language: Cherishing learners and their language. Language, Speech, and Hearing Services in Schools, 21(4), 221-227.

Lasky, E. Z. (1985). Comprehending and processing of information in clinic and classroom.; In C. S. Simon (Ed.), Communication skills and classroom success: Therapy methodologies for language-learning disabled students (pp. 113-132). San Diego, CA: College-Hill.

Launer, R. B., & Lahey, M. (1981). Passages: From the fifties to the eighties in language assessment. Topics in Language Disorders, 1(3), 11-29.

Lilly, M. S., & Givens-Ogle, L. B. (1981). Teacher consultation: Present, past, and future. Behavioral Disorders, 6, 73-77.

Lloyd, J. W., Crowley, E. P., Kohler, F. W., & Strain, P. S. (1988). Redefining the applied research agenda:

Cooperative learning, prereferral, teacher consultation, and peer-mediated interventions. Journal of Learning Disabilities, 21(1), 43-52.

Maitland, R. E., Fine, M. J., & Tracy, D. B. (1985). The effects of an interpersonally based problem-solving process on consultation outcomes. Journal of School Psychology, 23, 337-345.

Marvin, C. A. (1987). Consultation services: Changing Roles for SLP's. Journal of Childhood Communication Disorders, 11, 1-15.

McGonigel, M. J., & Garland, C. W. (1988). The individualized family service plan and the early intervention team: Team and family issues and recommended practices. Infants and Young Children, 1(1), 10-21.

McKinley, N. L., & Lord-Larson, V. (1985). Neglected language-disordered adolescent: A delivery model. Language, Speech, and Hearing Services in Schools, 16, 2-15.

Maheady, L., Towne, R., Algozzine, B., Mercer, J., & Ysseldyke, J. (1983). Minority representation: A case for alternative practices prior to referral. Learning Disability Quarterly, 6, 448-456.

Meyers, J. Parsons, D., & Martin, R. (1979). Mental health consultation in the schools. San Francisco: Jossey-Bass.

Miller, L. J., Lynch, E., & Campbell, J. (1990). Parents as partners: A new paradigm for collaboration. Best Practices in Speech-Language Pathology, 1, 49-56.

Moll, L. C. (1986). Writing as communication: Creating strategic learning environments for students. Theory Into Practice, 25, 102-108.

Montgomery, J. K. (1990). Building administrative support for collaboration. Best Practices in Speech-Language Pathology, 1, 75-79.

Nelson, N. W. (1984). Beyond information processing: The language of teachers and textbooks. In G. P. Wallach, & K. G. Butler (Eds.), Language learning disabilities in school-age children (pp. 154-178). Baltimore: Williams & Wilkins.

Nelson, N. W. (1986). Individual processing in classroom settings. Topics in Language Disorders, 6(2), 13-27.

Nelson, N. W. (1989). Curriculum based language assessment and intervention. Language, Speech and Hearing Services in the Schools, 20, 170-184.

Norris, J. A., & Damico, J. S. (1990). Whole language in theory and practice: Implications for language intervention. Language, Speech, and Hearing Services in Schools, 21(4), 212-220.

Osborn, A. F. (1963). Applied imagination: Principles and procedures of creative problem-solving (3rd ed.). New York: Scribner's.

Schulman, B. B. (Ed.). (1987). Making the collaborative consultation model work: The speech-language pathologist as consultant and teacher in mainstream education. Journal of Childhood Communication Disorders, 11.

Schulte, A. C., Osborne, S. S., & McKinney, J. D. (1990). Exceptional Children, 57(2), 162-173.

Schwartz, L., & McKinley, N. L. (1984). Daily communication: Strategies for the language disordered adolescent. Eau Claire, WI: Thinking Ink Publications.

Secord, W. A., & Wiig, E. H. (Eds.) (1990). Collaborative programs in the schools: Concepts, models, and procedures. Best Practices in Speech-Language Pathology, 1.

Silliman, E. R. (1984). Interactional competencies in the instructional context: The role of teaching discourse in learning. In G. P. Wallach, & K. G. Butler (Eds.), Language learning disabilities in school-age children (pp. 288-317). Baltimore: Williams & Wilkins.

Silliman, E. R. (1987). Individual differences in the classroom performance of language-impaired students. Seminars in Speech and Language, 8, 357-375.

Silliman, E. R., & Lamanna, M. L. (1986). Interactional dynamics of turn disruption: Group and individual effects. Topics in Language Disorders, 6(2), 28-43.

Simon, C. S. (1981). Communicative competence: A functional pragmatic approach to language therapy. Tucson AZ: Communication Skill Builders.

Simon, C. S. (Ed.). (1985). The language-learning disabled student: Description and therapy implications. In C. S. Simon (Ed.),.Communication skills and classroom success: Therapy methodologies for language-learning disabled students (pp. 1-42). San Diego, CA: College-Hill.

Simon, C. S. (1987). Out of the broom closet and into the classroom: The emerging SLP. Journal of Childhood Communication Disorders, 11, 41-66.

Singer, J. D., & Butler, J. A. (1987). The Education for All Handicapped Children Act: Schools as agents of social reform. Harvard Educational Review, 57(2), 125-152.

Szanton, E. S. (1988). A new day for infants and young children. Infants and Young Children, 1(1), v-viii.

Tattershall, S. (1987). Mission impossible: Learning how a classroom works before it's too late! Journal of Childhood Communication Disorders, 11, 181-184.

Tharp, R. G. (1975). The triadic model of consultation. In C. Parker (Ed.), Psychological consultation in the schools: Helping teachers meet special needs (pp.133-151). Reston, VA: Council for Exceptional Children.

Tharp, R. G., & Wetzell, R. J. (1969). Behavior modification in the natural environment. New York: Academic Press.

Tombari, M. L., & Bergan, J. R. (1978). Consultant cues and teacher verbalizations, judgments, and expectancies concerning children's adjustment problems. Journal of School Psychology, 16, 212-219.

Tough, J. (1977). The development of meaning. New York: Wiley.

Tyler, F. B., Pargament, K. I., & Gatz, M. (1983, April). The resource collaborator role. A model for interactions involving psychologists. American Psychologist, 388-398.

Wallach, G. & Miller, L. (1988). Language intervention and academic success. San Diego, CA: College Hill.

Wesson, C. L. (1991). Curriculum-based measurement and two models of follow-up consultation. Exceptional Children, 57(3), 246-256.

West, J. F., & Cannon, G. S. (1988). Essential collaborative consultation competencies for regular and special educators. Journal of Learning Disabilities, 21(1), 56-63.

Westby, C. E. (1990). The role of the speech-language pathologist in whole language. Language, Speech, and Hearing Services in Schools, 21(4), 228-243.

Wiig, E. H., & Semel, E. M. (1984). Language assessment and intervention for the learning disabled (2nd ed.). Columbus, OH: Merrill.

Witt, J. C., Moe, G., Gutkin, T. B., & Andrews, L. (1984). The effect of saying the same thing in different ways: The problem of language and jargon in school-based consultation. Journal of School Psychology, 22, 361-367.

Zigmond, N. & Miller, S. E. (1986). Assessment for instructional planning. Exceptional Children, 52, 501-509.

AT-RISK POPULATIONS

Innovative Practices for Meeting the Needs of Students who are At-Risk

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The task of identifying innovative practices for meeting the needs of students who are at-risk is a formidable endeavor. A realistic appreciation of the complexity involved in describing such populations must first begin with a precise discussion of what is meant by the term "at-risk". The basic concept of risk must not be misunderstood as presuming to establish causality or etiologic relationships between factors and outcomes. Rather, the basic concept of risk refers to a probabilistic relationship between a specific factor or a number of factors and an identifiable outcome (Pianta, 1990). The concept of risk varies with the experience and philosophical orientation of whomever is discussing the issue. Typically, professionals who work with infants and toddlers define risk factors as the medical, environmental or biological conditions which may lead to the development of a disability (Widerstrom, Mowder, & Sandall, 1991). Professionals who work with school-aged populations tend to define risk factors as those conditions which may lead to or exacerbate poor school performance and social development. A definition of risk for individuals in the secondary and post-secondary age range typically includes factors which may promote dropping-out, failure to obtain a job, the need to remain in dependent living situations, or missed post-secondary opportunities. In defining the issue, this paper

presents a consensus definition of the term "at-risk" to provide a common focus for the discussion. Categorization and classification of risk is discussed including a delineation of major risk factors according to chronological age group. Primary and secondary outcomes related to the presence of risk conditions are described. A model of potential educational paths is introduced which charts the progression of individuals who are at-risk. Alternative solutions are presented along with inhibitors to obtaining the ideal in service provision to students who are at- risk. Finally, the paper presents strategies for moving toward the ideal which can be incorporated into personnel preparation programs.

Defining the Issue

The authors use the term "at-risk" to describe a situation in which existing variables or circumstances are present that increase the probability of the need for current or future special education or related services interventions. Risk factors are precipitating conditions characteristic of individuals or groups that increase the likelihood that certain undesirable or negative outcomes will occur. Kochanek (1988) categorizes risk factors as either endogenous to the person (e.g., birth defect syndromes, child temperament, metabolic disorders) or ecological factors that include conditions exogenous to the person (e.g., family resources/strengths, social support systems, caregiving environment). In describing risk factors for school dropouts, Mizell (1986) makes a dichotomous distinction between factors that are beyond the control of the individual (e.g., ethnicity, family income, abuse or emotional neglect, illness, inappropriate education) versus those that exist because of choices made by the individual (e.g., truancy, chronic disciplinary problems, substance abuse, teenage pregnancy, law violations). In their discussion of risk factors that negatively affect children and youth in rural environments, Bull and Garrett (1989) use a number of categories to describe risk factors. These categories include factors related to commission, omission, developing conditions, induced problems, and preexisting conditions. The category of "commission" includes risk factors such as psychological maltreatment, child abuse, induced academic failure, extreme pressure for conformity, learned helplessness, discrimination, migratory existence, and criminal victimization. "Omission" factors are those such as child neglect, lack of parental or family support for education, lack of appropriate education, and nutritional deficiencies. Risk associated with developing conditions is descriptive of changes in domestic environment, diseases, psychological problems, and social withdrawal. Induced problems are those which include adolescent pregnancies, substance abuse, eating disorders, delinquency, gambling, self-destructive

behavior, stress, and aggression. Preexisting conditions are factors such as the implications of family or minority group membership, prenatal maternal activities, learning disabilities, congenital defects, birth trauma and educational disadvantage (Bull & Garrett, 1989).

Such risk factors are intensified when they are compounded by a discrepancy between the predisposing circumstances (e.g., lower socioeconomic background) and the demands of the prevailing situation (e.g., placement in a predominantly middle class education setting). Under such circumstances, a "dissonance" exists between the individual and the larger system in which he or she is operating. In general, such individual-system dissonance occurs and either comprises or exacerbates a risk factor whenever there is an incompatibility between the values, beliefs, or attitudes of the individual and the expectations or skills of the system. The result is that the system fails to appreciate the unique educational, health, or social circumstances of the individual which will preclude a successful match between needs and services. When this individual-system dissonance exists, the individual fails to receive appropriate services and there is a heightened risk for negative educational outcomes (Hoover & Collier, 1985).

Although some variables promote risk more intensely at given ages, several factors may appear at any given time to increase the individual's risk. These general risk factors include: limited English proficiency, poverty, poor health care (pre- and post-natal), insufficient service provisions, and limited access to services that are available. It is important to note that cultural/linguistic diversity itself is not a risk factor. Risk is incurred when dissonance exists between members of groups whose culture or language are different from that of the majority and the service provision system. Research demonstrates that crosscultural stress factors and acculturation side effects do place individuals at-risk for being identified as eligible for special education services (Collier, 1985; Padilla, 1980). Special education decisions may be influenced by naturally occurring pupil characteristics such as gender, socioeconomic status, physical appearance, and the availability of services rather than assessment data (Christenson, Ysseldyke, & Algozzine, 1982; House Select Committee on Children, Youth and Families, 1989; Reschly, 1986; Ysseldyke, Algozzine, Richey, & Graden, 1982).

In addition to pervasive risk conditions such as poverty, lack of education, or generally poor health, specific factors may present heightened risk for different age groups. Some of the more prevalent chronologically related age factors are delineated in Box 1.

Infant and Toddler Years	Early Childhood Years
low birth weight	social/emotional maladaptation
prematurity	inconsistent/dysfunctional family care
maternal substance abuse	multiple care placements
HIV positive condition	homelessness
biological and genetic conditions (eg., cleft palate, fragile X syndrome)	transience and mobility
born to teen mothers	exposure to toxic substances (eg., lead, uranium)
poor prenatal nutrition	limited access to compensatory services
abuse and neglect	inadequate childcare services

Elementary Years

inadequate educational services
lack of prereferral options
absence of desirable role models
inflexible and sometimes "faddish" curricula
lack of elementary counselors
children who "fall through the cracks"
substance abuse
physical, sexual, and psychological abuse

Secondary Years	Postsecondary Years
academic failure	inadequate opportunities for independent living
dropping out	inadequate training options
teen pregnancy	lack of postsecondary programs
substance abuse	inflexible college formats and standards
gang involvement	necessity for self-identifying need for help
negative peer pressure	
sudden onset disabilities	
disabilities not previously diagnosed	
environmental alienation	
inadvertent consequences of school reforms	

Box 1: Classification Scheme for Age Related Risk Factors

The classification scheme illustrated in Box 1 does not intend to imply that risk factors are age specific. Instead, although certain factors may be more commonly manifest at certain ages, there is interaction across chronological ages.

A review of select research and a system for chronologically classifying specific risk conditions has provided a basis for describing factors which can potentially promote negative or undesirable outcomes for an individual. As with severity of risk, outcomes may also be perceived as occurring along a hierarchical continuum. An analysis of primary and secondary outcomes, along with concurrent interactional relationships, provides a model to facilitate strategic intervention planning.

Primary Outcomes

Primary outcomes are delays, disorders or deficits which occur in the development of one or more of the

following domains: cognitive/intellectual, academic skills, social/emotional, behavioral, physical/motor, neurological, speech/language, basic sensory functioning, or health status. A delay can be considered a skill that has not been mastered within the expected age range, however progress has been made towards the achievement of the skill. A disorder refers to an impairment in the performance of a skill which can be mastered given appropriate intervention. A deficit refers to an impairment which cannot be corrected, but for which the individual may compensate (Murphy, Nichter & Liden, 1982). Primary outcomes related to specific delays, disorders or deficits can lead to negative consequences in the quality of schooling for individuals who are at risk. Primary outcomes can, but do not necessarily have to result in secondary outcomes.

Secondary Outcomes

Secondary outcomes are those problems that can occur as a result of the manifestation of undesirable primary outcomes. There are four secondary outcomes that individuals who are at risk may experience as they matriculate through the educational system: (a) lack of skills or competencies that facilitate readiness for schooling; (b) persistent and chronic academic and social failure; (c) a decision to drop out; and (d) lack of skills or competencies for post-secondary educational, vocational or independent living opportunities. These outcomes are directly antagonistic to the explicit goals of both regular and special education.

Relationship Between Risk Factors, Primary and Secondary Outcomes

The relationship between risk factors, primary and secondary outcomes is illustrated in Figure 1. Individuals who are at-risk demonstrate variable paths of progress as they matriculate through the educational system. This variability is represented in Figure 1 by four distinct paths.

Path 1 traces the progress of individuals who belong to high risk groups but who do not develop significant delays, disorders or deficits in any of the given domains. These persons exercise the skills necessary for school and post-secondary success. No special education or related services interventions are needed by this group. An individual born to drug abusing minority parents in a low income household (risk factors) who has the constitutional strengths and strategic support systems to enable him or her to avoid significant school problems (secondary outcomes) is an example of a student following Path 1.

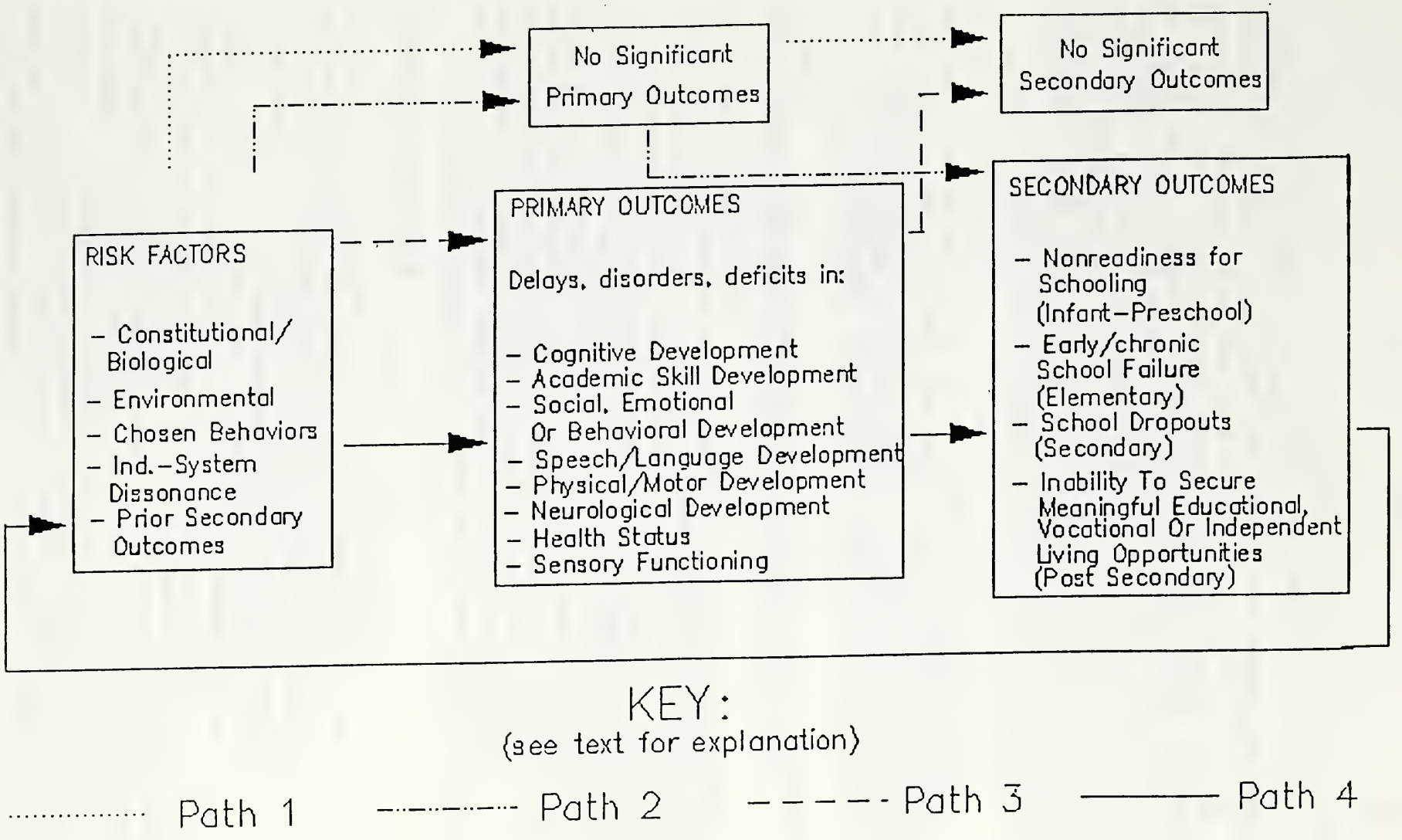

Figure 1: Relationships Between Risk Factors, Primary and Secondary Outcomes

Similar to Path 1, Path 2 represents individuals who belong to high risk groups but do not experience significant problems associated with primary outcomes. However, these individuals do experience failure, frustration and apathy related to schooling. This could be attributed to detrimental chosen behaviors (e.g., drug abuse, teen pregnancy), unforeseen events (e.g., toxic poisoning, traffic accidents), or to the unavailability of or deficiencies in the quality of service delivery by the educational system (i.e., individual-system dissonance). For example, a young high school female may live in a home with parents who possess psychiatric problems (risk factors). Although she may occasionally experience a moderate degree of stress, the girl displays normal development in all areas (no significant primary outcomes). However, a recent series of sexual abuses by a new stepfather (environmental risk factor) goes unnoticed and untreated by a school that has poor counseling services (individual-system dissonance). The girl's emotional pain gradually increases, her grades deteriorate and eventually she drops out of school (secondary outcomes).

Path 3 traces the course followed by individuals who are at high risk and manifest significant delays, disorders or deficits in one or more of the given domains. However, individuals receive appropriate and quality multidisciplinary support services that are sufficient for preventing the inception and accumulation of a pattern of school failure. For example, a visually impaired elementary aged child who lacks social competence as a result of the visual disability but receives crucial support and training services will be able to develop the academic and social skills necessary for school success.

Path 4 is perhaps the most common scenario experienced by students enrolled in special education. In this path, individuals who are at risk manifest obvious problems in one or more of the primary outcome domains. These delays, disorders or deficits result in school problems (secondary outcomes) which then become risk factors for future problems. The cycle is represented in Figure 1 by the recursive loop that distinguishes Path 4 from the other three paths. For example, a mildly mentally retarded (primary outcome) preschooler may be diagnosed by a screening procedure as not ready to enter kindergarten (secondary outcome). Due to a lack of interagency communication, the child enters kindergarten and is promoted despite chronic academic skill problems. Eventually the child is placed in a special education system that has a high teacher turnover rate, chronic student truancy, and is considerably discrepant with respect to research-based instructional or service delivery options. With little or no home support to continue schooling, the student drops out of school in the 10th grade. Without marketable skills and

an inability to delay gratification, the individual engages in illegal activity to secure money. In this scenario, each secondary outcome becomes a risk factor for worsening primary outcomes and successive secondary outcomes (i.e., lack of readiness for kindergarten becomes a risk factor for chronic elementary school failure, which in turn becomes a risk factor for dropping out of high school, which then becomes a risk factor for poor post-secondary societal adjustment). This is not to imply that an infant diagnosed as developmentally delayed is destined to become an adult criminal. Although Path 4 individuals may travel the loop more than once, timely and appropriate intervention may facilitate the crossover to a Path 3 trajectory.

Alternative Solutions

In order to avoid a Path 4 course for an individual who is at risk, cultural and societal attitudes must be modified. As society attempts to address the factors which lead to the development of risk, personnel preparation programs must equip future and practicing service providers to better meet the needs of students who are already at risk. In addition, personnel preparation programs must articulate techniques which may serve to reduce risk among previously unaffected students. To accomplish this task, training programs must recognize and incorporate critical components related to identifying and reducing risk factors. These components will be outlined in the subsequent section entitled, "Strategies for Moving Toward the Ideal". The interested reader is also advised to explore research models which present techniques for intervention (Garber, H., 1988; Kirby, M., 1989; Kunesh, L., 1990; McPartland, J & Slavin, R., 1990).

Inhibitors to Obtaining the Ideal

Preservice and in-service personnel preparation programs are challenged to restructure traditional content to better equip service providers to meet the needs of students who are at-risk. Personnel preparation programs will not be able to meet the challenge alone. External barriers generate obstacles that impede timely progress. It is difficult for preparation programs to provide interdisciplinary training given that interagency collaboration has proven to be arduous (Weiner & Koppelman, 1987). Service providers as well as training programs are typically autonomous in nature. It may be challenging for personnel preparation programs to find appropriate field placements to train for collaboration when service providers are just now becoming more interactive. Precedents must be set among preparation programs to facilitate training and post school collaboration (Norlander, Shaw, Case, & Reich, 1991).

A more basic barrier to the restructuring of personnel preparation program content is the existing discrepancy between service providers and consumers. Research demonstrates that college and university preparation programs fail to consider the needs of the consumers and often neglect to address the concerns of service system employers (McLaughlin, Valdivieso, Spence, & Fuller, 1988). Clearly, a more accurate match needs to be made between what consumers need and what service providers are competent to provide. To begin with, service providers need to be more competent in the ability to acknowledge and identify risk factors.

Personnel preparation programs encounter inhibitors in two critical areas related to cultural and linguistic diversity. Most programs provide only cursory acknowledgement of the influence that cultural and linguistic diversity has on the effectiveness of service provision. Without concerted emphasis, service providers will continue to be ignorant of this important element. In addition, personnel preparation programs have been unsuccessful at recruiting individuals in minority groups to enter training programs. A concentrated effort needs to be made towards minority personnel recruitment and retention at all levels because of the diminishing percentages of Native Americans, Hispanics and African Americans in the profession.

Finally, the school reform movement may serve as an inhibitor to better service provision for students who are at risk. Students who are at risk for academic failure and/or dropping out of school may feel unable to meet the demands of additional requirements for graduation and therefore may withdraw from school. Similarly, unless additional educational assistance is provided to students from traditionally underachieving minority groups in the struggle to meet heightened standards, the goal of recruiting these individuals to the profession will not be met.

Strategies for Moving Toward the Ideal

To enable service providers to overcome inhibitors and become competent in promoting a Path 1 course for infants, toddlers, children, youth and adults who are at-risk, personnel preparation programs must provide training which is proactive rather than reactionary. Efforts need to made towards the end of removing the inhibitors. To facilitate the removal of barriers to effective service provision, personnel preparation programs should ensure that the minimial outcomes listed below are achieved by trainees.

1. The ability to identify the broad array of factors that create risk and their subsequent effects on students. This may be accomplished through:

   * Comprehensive curricular modifications rather than a proliferation of curricular add-ons;

   * Curricular modifications which focus on teaching strategies, curricular delivery, technology, and life long learning, and

   * Emphasis on effective pre-referral strategies, including elements of multiservice programs.

2. The ability to understand and appreciate the contributions of cultural and linguistic diversity as well as the influence of family dynamics on school engagement. This may be accomplished through:

   * A priority on understanding and incorporating cultural/linguistic diversity into exemplary practices;

   * Ensuring involvement of minority group members through student and faculty recruitment practices (e.g., full-time and volunteer faculty, support personnel, student body), and

   * Promoting the distinction between learning and behavior problems due to "difference" and "dissonance" and those due to "disability".

3. The ability to be sensitive to the roles of other providers and collaborate fully in developing service plans. This may be accomplished through:

   * Preservice and inservice opportunities that target and incorporate members of disciplines other than education, including mental health workers, social workers, psychologists, and lawyers;

   * Shared training opportunities, including experience in multicultural field placements--create multi-competent rather than multi-incompetent.

4. The ability to acquire and demonstrate leadership skills and the ability to influence policies and implement systemic change. This may be accomplished through:

   * Developing mechanisms for obtaining input from consumers to help reduce individual-system dissonance, and

   * Providing experience working with advocacy groups and change agents.

In personnel preparation programs, the incorporation of the preceding components will necessitate curricular modifications and increased variety in training experiences. Curricular modifications which result in "add-on" courses will not be as successful as restructuring modifications which are more encompassing and integrated. Training experiences can promote leadership and collaboration by becoming more varied with the inclusion of non-traditional placement options. For example, special educators may choose placement in a mental health agency or social workers might elect to receive part of their field experience in a hospital setting.

The literature describes a number of practices which training programs can utilize to foster the elements specified above. The implementation of the Professional Development Center (PDC) model where Schools of Education develop long term collaborative relationships with school districts (Calder, 1990) provides opportunities to address virtually all of these concerns. Since PDC's typically involve integrated training opportunities (preschool, elementary, secondary and special education), include inner city schools providing significant student and staff diversity and encourage collaborative attempts to address school reform (Norlander, Shaw, Case & Reich, 1991; Shaw et al., 1990), trainees should be able to develop the skills necessary for successful Path 1 and Path 3 interventions.

References

Bull, K.S. & Garrett, M. (1989). Dimensions of being "at-risk": Children and youth in rural environments. In: Education and the Changing Rural Community: Anticipating the 21st Century. Proceedings of the 1989 ACRES/NRSSC Symposium. (ERIC Document Reproduction Service No. ED 315 212).

Calder, C.R. (1990). Professional development centers: A collaborative model. In L.M. Bullock & R.L. Simpson (Eds.), Critical issues in special education: Implications for personnel preparation (pp. 37-43). Denton: University of North Texas.

Christenson, S., Ysseldyke, J., & Algozzine, B. (1982). Institutional constraints and external pressures influencing referral decisions. Psychology in the Schools, 19, 328-334.

Collier, C. (1985). A comparison of acculturation and education characteristics of referred and nonreferred culturally and linguistically different children. (Dissertation Abstracts International, 46, 2993A). NABE Journal, 1987.

Collier, C. & Hoover, J.J. (1987). Sociocultural considerations when referring minority children for learning disabilities. Learning Disabilities Focus, 3(1), 39-45.

House Select Committee on Children, Youth and Families. (1989, July). Barriers and opportunities for America's young black men. Hearing before the Select Committee on Children, Youth and Families. House of Representatives, One Hundred First Congress, First Session. (ERIC Document Reproduction Service No. ED 314 526).Hoover, J.J. & Collier, C. (1985). Referring culturally different children: Sociocultural considerations. Academic Therapy, 20(4), 503-509.

Kirby, M. R. (1989). Improving literacy experiences of at-risk kindergarten children through a teacher education workshop. Nova University. (ERIC Document Reproduction Service No. ED 318 173).

Kochanek, T. (1988). Conceptualizing screening models for developmentally disabled and high risk children and their families. Zero to Three, 9(2), 16-20.

Kunesh, L. G. (1990). Early intervention for at-risk children in the North Central Region: A comparative analysis of selected state education agencies' policies. Executive summary. Elmhurst, IL: North Central Regional Educational Lab. (ERIC Document Reproduction Service No. ED 321 875).

McLaughlin, M.J., Valdivieso, C.H., Spence, K.L., & Fuller, B.C. (1988). Special education teacher preparation: A synthesis of four research studies. Exceptional Children, 55, 215-221.

McPartland, J. M. & Slavin, R. E. (1990). Increasing achievement of at-risk students at each grade level. Policy perspectives series. (Report No. IS-90-985). Washington, DC: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED 318 134).

Mizell, M.H. (1986). Considerations preliminary to the development of dropout prevention policies and programs. ERS Spectrum, 4(4), 21-27.

Norlander, K.A., Shaw, S.F., Case, C.W., & Reich, M.L. (1991). Implementing school reform: A preparation program to encourage collaboration between special and regular educators. Storrs, CT: University of Connecticut.

Padilla, A. (1980). Acculturation: Theory, models, and some new findings. American Association for the Advancement of Science Symposium Series (No.39). Boulder: Westview.

Pianta, R.C. (1990). Widening the debate on educational reform: Prevention as a viable alternative. Exceptional Children, 56(4), 306-313.

Reschly, D.J. (1986). Economic and cultural factors in childhood exceptionality. In R.T. Brown and C.R. Reynolds (Eds.), Psychological perspectives on childhood exceptionality: A handbook (pp. 423-466). New York: John Wiley & Sons.

Shaw, S. F., Biklen, D., Conlon, S., Dunn, J., Kramer, J., & DeRoma-Wagner, V. (1990). Special education and school reform. In L.M. Bullock & R.L. Simpson (Eds.), Critical issues in special education: Implications for personnel preparation (pp. 12-25). Denton: University of North Texas.

Weiner, R., & Koppelman, J. (1987). From birth to 5: Serving the youngest handicapped children. Alexandria, VA: Capitol.

Widerstrom, A.H., Mowder, B.A., Sandall, S.R. (1991). At-risk and handicapped newborns and infants: Development, assessment, & intervention. Englewood Cliffs, NJ: Prentice Hall.

Ysseldyke, J.E., Algozzine, B., Richey, L., & Graden, J. (1982). Declaring students eligible for learning disability services: Why bother with the data? Learning Disability Quarterly, 5, 37-44.

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